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HEARING
ON
**NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2016**
AND
**OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS**
BEFORE THE
**COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED FOURTEENTH CONGRESS**
FIRST SESSION

SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES HEARING
ON
**DEPARTMENT OF THE NAVY FISCAL
YEAR 2016 BUDGET REQUEST FOR
SEAPOWER AND PROJECTION FORCES**

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**DEPARTMENT OF THE NAVY FISCAL YEAR 2016 BUDGET
REQUEST FOR SEAPOWER AND PROJECTION FORCES**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,
Washington, DC, Wednesday, February 25, 2015.

The subcommittee met, pursuant to call, at 2:30 p.m., in room 2212, Rayburn House Office Building, Hon. J. Randy Forbes (chairman of the subcommittee) presiding.

Mr. FORBES. What we are going to do in the interest of time—because, as we mentioned to you, we may have another set of votes called—Mr. Courtney and I both are going to waive our opening remarks, and we are simply going to put those remarks in the record.

[The prepared statements of Mr. Forbes and Mr. Courtney can be found in the Appendix beginning on page 27.]

Mr. FORBES. We are going to waive any introductions we might have had for our panel members because each of the members have those in their packages. And so what we would like to do is go ahead and start with your opening remarks.

Mr. Secretary, are you going to start us off? So if you will do that. Then are we going to go to, General, or, Admiral, next after you? Ok, so why don't we do that?

And, Mr. Secretary, we will let you start us off. Thank you, the three of you, for being here. Again, without objection, we are going to include all of our speakers' written remarks in the record.

So Mr. Secretary, we turn the floor over to you.

STATEMENT OF HON. SEAN J. STACKLEY, ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT, AND ACQUISITION), DEPARTMENT OF THE NAVY

Secretary STACKLEY. Chairman Forbes, Ranking Member Courtney, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address Department of the Navy acquisition programs.

Joining me today are Deputy Chief of Naval Operations, Vice Admiral Joe Mulloy; and Deputy Commandant, Marine Corps, for Combat Development Integration, Lieutenant General Ken Glueck.

With the permission of the subcommittee, I propose to provide brief opening remarks and submit a separate formal statement for the record.

We are in the fortunate position of having received the national defense authorizations and appropriations bills in the first quarter of this fiscal year. I cannot overstate that escaping the extraordinary disruption of government shutdown, furloughs, extensive continuing resolutions, sequestration, and the budget uncertainty

experienced in prior recent years gives us a measure of stability that enables far greater efficiency and effectiveness in carrying out our mission this year.

In fact, the Department of the Navy fared extremely well in this year's bills. And we greatly appreciate your efforts for not only has Congress fully supported our request, the committee's increased procurement in our most critical programs sending a strong signal of support regarding the role of our Navy and Marine Corps. However, the greater reality is that across fiscal years 2013, 2014, and 2015, the Navy's budget has been reduced by \$25 billion compared to the funding that we had determined was necessary to meet the Defense Strategic Guidance or the DSG. As a result, quantities of ships, aircraft, and weapons have been impacted. Development programs have been stretched. Modernization has been slowed. Deployments have been cancelled. Deployments have been stretched, placing greater strain on the force. Depot and facilities maintenance has been deferred, all adding to a growing backlog.

And, with a significant portion of the reductions levied against investment accounts, the resultant procurement quantity reductions had the perverse impact of driving up unit cost for weapons systems at a time when cost is one of the great threats before us and, too, weakening our strategic industrial base.

In building the 2016 budget request, we have had to wrestle with the clash between the needs of our military to meet the requirements of the DSG, the implications of the threats posed by the increasingly technologically capable adversaries or potential adversaries, and the implications of the Budget Control Act.

We have been faithful to our fiscal responsibilities, leveraging every tool available to drive down costs such that alongside range and speed and power and payload, affordability has become a requirement.

Independent of the fiscal environment, the demand for naval presence, in the words of the CNO [Chief of Naval Operations], being where it matters when it matters, is on a steady rise. Near half our fleet is routinely at sea, and of that number, about 100 ships and more than 75,000 sailors and marines are deployed. Therefore, we have placed a priority on forward presence, near-term readiness, investment in those future capabilities critical to our long-term technical superiority and stability in our shipbuilding program.

Our shipbuilding program is, in fact, very stable. The fleet under construction is about 65 ships strong. As highlights, *America* LHA-6, commissioned this past fall with the keel of her sister ship, *Tripoli* LHA-7, laid earlier in the year. These ships' tremendous aviation capabilities when coupled with the Marines' version of the Joint Strike Fighter open a new chapter in naval aviation. At Newport News, as we complete construction and testing of our first new design carrier in more than 40 years, CVN-78, the *Gerald Ford*, we start construction of CVN-79, the *John F. Kennedy*. In doing so, we are strongly partnered with industry to control cost in the lead ship and to leverage lessons learned and to make the necessary investments to reduce cost on follow ships. Likewise, DDG-1000, the first new design destroyer in 30 years, is being brought to life readying for her sea trials later this year. DDG-51 construction is pro-

gressing well with the first restart ship, DDG-113, on track to deliver at Ingalls Shipyard in 2016.

Equally important is the Flight III DDG-51 destroyer upgrade. The Navy relies on your continued support for this capability, which is so critical to countering increasing cruise and ballistic missile threats.

Littoral Combat Ship continues to march smartly down learning curve at both building yards, and as was announced, the Navy will commence a new frigate-class design based on modifying the current LCS, with an over-the-horizon surface missile, antisubmarine warfare capability exceeding that of today's surface combatants, enhanced radar, electronic warfare capabilities, enhanced survivability features, and other upgrades significantly expanding the ship's range of operations.

In submarines, we continue to leverage learning on the *Virginia* program. And the next major upgrade, *Virginia* Payload Modules, is on track to provide increased undersea strike capacity. And we are rapidly ramping up design activities on the *Ohio* replacement program to support her critical schedule. In other ship programs, we have requested the balance of funding for a 12th LPD [Amphibious Transport Dock] class. We thank the Congress for its support in prior years, and we are going to leverage the benefits brought by that ship to our amphibious force.

And we are proceeding with three new major shipbuilding programs: the Fleet Oiler T-AO(X) in 2016; the next big deck amphib [amphibious assault ship], LHA-8, in 2018—excuse me, 2017; and the replacement for the LSD-41, the LX(R) at the end of the FYDP [Future Years Defense Program]. Each is critical to our force. Each is critical to the industrial base. And affordability is critical to each. So we have constructed an acquisition strategy to meet these objectives. Of interest to this subcommittee, we have awarded the planning contract for the refueling overhaul, CVN-73 *George Washington*, and likewise, we are proceeding with the execution of the cruiser and LSD [Landing Ship, Dock] modernization programs in accordance with Congress' approval in 2015.

Major aviation programs under this subcommittee's purview, the Navy's game-changing maritime patrol aircraft, the P-8A Poseidon, is today on deployment, and we are on track with planned follow-on incremental capability upgrades to that aircraft. And the Navy's next-generation early warning aircraft, the E-2D Advanced Hawkeye, has entered the fleet and, in conjunction with other fleet assets, will be providing an air defense capability far beyond that available in the Navy today.

Meanwhile, the third leg of our Naval Air-Ground Task Force, the Marine Corps' tactical vehicles is at the front end of much needed recapitalization. In 2015, we commence procurement of the joint light tactical vehicle to replace the Humvee. We press forward with survivability upgrades to the amphibious assault vehicle to ensure their viability for future combat. And we are moving forward with acquiring a highly capable, highly survivable wheeled vehicle in the first phase of the amphibious combat vehicle program. The strategy for procuring this vehicle is striking a necessary balance between requirements and affordability.

And separately, we commence procurement of our newest ship-to-shore connector to provide high-speed transfer of Marine Corps tactical vehicles from the sea.

In summary, the Department's 2016 budget request is sized and shaped to provide that measure of capability, capacity, and readiness, to uphold national policies and to protect us against potential enemies.

In response to sequestration in 2013, the Bipartisan Budget Act level funding in 2014 and 2015, and the reductions across 2016 through 2020, the Department has been judicious in controlling costs, reducing procurements, stretching developments, and delaying modernization. However, these actions necessarily add cost to our programs, add risk to our industrial base, and add risk to our ability to meet the Defense Strategic Guidance. If we are forced to execute at BCA [Budget Control Act] levels in fiscal year 2016 and beyond, these cuts will go deeper, and we fundamentally change our Navy and Marine Corps and the industrial base we rely upon.

Mr. Chairman, thank you for the opportunity to appear before you today. We look forward to answering your questions.

[The joint prepared statement of Secretary Stackley, General Glueck, and Admiral Mulloy can be found in the Appendix on page 31.]

Mr. FORBES. Thank you, Mr. Secretary.

Admiral, are you up next, or, General? Which one is going to—General, I think you are up next then.

Thank you for being here, and we yield you the floor.

STATEMENT OF LTGEN KENNETH J. GLUECK, JR., USMC, DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND INTEGRATION, AND COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND

General GLUECK. Thank you, Chairman Forbes, Ranking Member Courtney, distinguished members of the subcommittee. Thank you for this opportunity to testify before you today.

The Marine Corps' ability to serve as our Nation's premiere crisis response force is due in a large part to this subcommittee's continued strong support. And, on behalf of all Marines, I would like to say thank you.

The current situation is chaotic. This committee has heard from numerous witnesses this year who have characterized the global security situation as one that is rapidly changing, increasingly complex. These multidimensional challenges highlight the increasingly broad range of warfighting capabilities our military must possess to ensure success on the battlefield. While these challenges are global in nature, they increasingly occur in areas that have a maritime component. Increased competition for limited natural resources, demographic shifts to the coastal urban centers, territorial disputes over maritime borders, will continue to contribute to future conflict. These conflicts will require a robust naval force that can respond rapidly from the sea.

Your Navy and Marine Corps team provides the means to ensure our national interests remain protected. Forward-deployed, forward-stationed forces enable us to respond to today's crisis with today's force today. These forces are characterized by their flexibility

and their ability to loiter indefinitely to provide a deterrent and, when required, to project power ashore at the place and the time of our choosing. They provide our Nation's leadership decision space necessary to make informed decisions during rapidly evolving situations. Amphibious warships with embarked Marines are crucial enablers to these capabilities. Referred to as the Swiss Army knife of the fleet, they are versatile, interoperable warfighting platforms capable of going into harm's way and providing diverse capabilities unlike any other naval platform.

However, demand for these ships and embarked capabilities far outpace the available inventory. Because of inventory shortages, the Marine Corps has invested in land-based, special-purpose Marine Air-Ground Task Forces and is exploring how to best leverage existing alternative sea-based platforms to generate enhanced littoral mobility, maneuver capabilities for our Marine Corps forces positioned in Europe, Africa, and Pacific areas of operation.

Due to the generosity and foresight of Congress, our Nation will greatly benefit from LPD-28, the 12th ship in the *San Antonio* class, which is now programmed. When that ship comes on line, your naval forces will have an additional capability to respond to crisis. This remarkable line of amphibious ships has proven itself since 2006, and has provided tremendous capability to deployed amphibious ready groups and our embarked Marines. The recent decision to base the dock landing ship replacement, or LX(R), on the *San Antonio* hull form will provide a much improved capability and capacity. And in particular, enhanced command and control, aviation operations, and maintenance capabilities will enable this ship to conduct independent operations and further expand the operational reach of our forward deployed forces. The future amphibious fleet is one that is characterized by its rapid flexibility and interoperability with the joint force. No one platform will prove transformational. It will be the combination of existing amphibious warships, alternative platforms for Military Sealift Command, and the maritime preposition force, with ships, such as the Joint High Speed Vessel and the Mobile Landing Platform, with the Advanced Forward Staging Base that will enable us to achieve our full potential.

Your Navy and Marine Corps team is committed to conducting the experimentation, war-gaming, and dedicated planning to ensure that we invest wisely in our future force to generate the most value for every platform in the inventory. Our forward-stationed and deployed Marines remain our Nation's 911 force in readiness, and the investments that we are making in the future will ensure that they remain poised to do so. In partnership with the Navy, the Marine Corps looks forward to working with you to address these issues.

I thank you for this opportunity and look forward to your questions.

[The joint prepared statement of General Glueck, Secretary Stackley, and Admiral Mulloy can be found in the Appendix on page 31.]

Mr. FORBES. Thank you, General.
Admiral.

STATEMENT OF VADM JOSEPH P. MULLOY, USN, DEPUTY CHIEF OF NAVAL OPERATIONS, INTEGRATION OF CAPABILITIES AND RESOURCES

Admiral MULLOY. Sir, thank you. Chairman Forbes, Ranking Member Courtney, and distinguished members of the subcommittee, I am honored to be here today to testify on behalf your Navy seapower and projection forces.

I welcome the new members of the subcommittee. I look forward to working with you all as we work on the 2016 budget. In developing this 2016 President's budget, we carefully analyzed the needs of our Nation and Navy in order to meet the missions of the Defense Strategic Guidance in the most recent Quadrennial Defense Review. This analysis looked at ends, ways, and means necessary to fight and win today's wars while building the ability to win tomorrow's; to operate forward to deter aggression; and to be ready to fight and responsibly employ our diverse force.

We remain committed to the rebalancing of the majority of our naval forces to the Asia-Pacific with 60 percent of our ships and planes in that region by 2020. However, with the reality of the current Federal budget limitations and our commitment to do our part in bringing our Nation's fiscal house in order, we have made difficult choices to best balance capability, capacity, readiness, and our industrial base, and still meet the mission of the defense strategy, albeit with some risk.

Our 2016 budget represents what we feel is the minimum necessary for our Navy to continue to be where it matters when it matters. It reflects difficult choices and actions we had to take due to shortfalls over the last 3 years. Thus any reduction in 2016, whether it be from sequestration or action by Congress at some level of funding in between, would be extremely challenging.

I would like to reiterate what Secretary Stackley said: The Navy is down \$25 billion over the last 3 years due to sequestration and the bipartisan budgets acts. That has required us to adapt and modify what we are doing. At the same time, this needs to stop. We are hanging on. We are making do, but the threats we face trying to defend this country, they don't have to make do. If we are limited to sequestration level funding, the Nation would need to think about what kind of military we can afford and how we would need to reprioritize in that situation. That analysis would need to factor in the global environment, the Nation's defense priorities, America's role in the international security system, and the capabilities and threats of our adversaries, as well as timing of sequestration and the method of implementation. That analysis will dictate what kind of cuts will be required. You have to do that analysis first, revise our defense strategy, before talking about specific impacts. We fight as a joint force. We must adjust as a joint force.

We ask for your support in providing the strategy-based Navy that our 2016 budget will sustain and avoid the budget-based Navy that sequestration will give us. I look forward to answering your questions.

[The joint prepared statement of Admiral Mulloy, Secretary Stackley, and General Glueck can be found in the Appendix on page 31.]

Mr. FORBES. Admiral, thank you.

As I mentioned earlier, I am going to defer my questions to the end so that members can get their questions in.

I would like to go to Mr. Courtney and yield to him for any questions he may have.

Mr. COURTNEY. Thank you, Mr. Chairman, and thank you to the witnesses for your patience and your testimony.

Secretary Stackley, you talked about some of the modifications last year that Congress made to improve the initial submission that came over last January. And I think it is important to note that this subcommittee actually kind of led the way in terms of those modifications just for no other reason that we go first in this whole process.

But, again, if you look at the authorizing committees and Appropriations Committee, they pretty much followed the path that we started here. So we look forward to continuing that collaboration that made the best of a bad situation last year. The chairman deserves a lot of credit actually for the great work that took place last year.

Secretary Stackley, just to zoom in on one issue that you mentioned, and I will let, again, the other members jump in. The *Virginia* Payload program, which, again, is an attempt to try and as quickly as possible replace the strike capacity that we are going to lose when the SSGNs [cruise missile submarines] go off line, the plan came over, again, talks about implementing that modification program in 2019 and 2020. The Joint Resources Oversight Council had talked about, again, trying to do that maybe even more robustly. And I was just wondering if you had any thoughts about possibly trying to accelerate that process in terms of the ability of the industrial base to handle it and, again, just sort of whether the Navy thinks that that is a plausible change that we can make to, again, fill that gap that is going to happen when the—

Secretary STACKLEY. Yes, sir. I appreciate the question. First, the SSGNs, the four SSGNs, retire in the 2026 through 2028 window. When they retire, each of those boats carries missile tube capacity for 154 missiles. So you look at about 600-missile-tube capacity exiting the fleet in the mid-2020s.

The *Virginia* Payload Module approach is to buy back that capacity, but in doing so, it is adding 28 missile tubes per submarine, 28-missile capacity per submarine. So it is going to take a long time to recapitalize the capacity that goes out with the GNs [short-hand for SSGNs] in the mid-2020s.

The program plan is to commence installation of VPM, the *Virginia* Payload Module, with a next multiyear procurement in 2019. The design and development has all been paced to that milestone. If we are going to try to really hammer away at what will be a shortfall to undersea strike capacity, the more we can do, the earlier we can do, the better for our Nation.

So what I have, frankly, committed in earlier discussions with your staff and in discussions on my side with the PEO [program executive officer] for submarines and the industrial sector is to take a look at, can we, in fact, complete those design and development activities earlier than the 2019 timeframe to give the Navy and the Nation the option to determine whether or not we want to advance *Virginia* Payload Modules earlier in the submarine build cycle. So

we are doing that work right now, and we are doing that in the context of the other submarine work that is all coming together at the same time. So we have *Virginia* Payload Module design, and then we would have the build that comes with that, that increases the capacity throughput that would have to take place in our submarine build yards, on top of the sea-based strategic deterrent, the *Ohio* replacement program that is a 2021 start, but well before 2021, we are deep into design today, and we are going to be doing advanced construction activities at the same time.

So we have to manage the total workload at the submarine yards. We have to determine can we, in fact, accelerate the design and development activities to support an earlier introduction to *Virginia* Payload Modules, and then look at balancing the workload across the two yards to do that. We are doing those studies right now in concert, frankly, with an overarching study that we are doing which is looking at how, in fact, are we going to build *Ohio* replacement in concert with the ongoing *Virginia* submarine construction, in concert with the introduction of *Virginia* Payload Modules all within a couple of year window.

So the answer is we are looking at it. We have the right people looking at it. I would ask you to give us a couple of months to complete our review. And we will be ready to come back and give you more specifics in the March-April timeframe.

Mr. FORBES. Would the gentleman yield?

Mr. Secretary, we don't have a couple of months, so if you can narrow that scope down, it would be very, very helpful to us as we are looking to try to just accelerate a little bit of that. If it is not doable, it is not doable. But we have got some big gaps that are sitting out there. We just want to help you try to close those gaps. So anything you could get for us in a quicker timeframe, at least for this year, might be helpful to do that. So I know you can only do what you can do, but we just make that request to you.

Secretary STACKLEY. Yes, sir.

Sir, I will tell you, just to complete the thought, though, I don't expect there is going to be—I don't anticipate change to the early activities. It is really to take a look at the back end of the FYDP because that is where the mountain of the work is.

Mr. FORBES. That is good. We recognize at this time Mr. Knight from California for 5 minutes if he has any questions.

No questions.

The gentleman from Montana is recognized for 5 minutes if he has any questions.

Mr. ZINKE. I do not, sir.

Mr. FORBES. Then the vice chairman, Mr. Hunter, is recognized for 5 minutes.

Mr. HUNTER. Thank you, Mr. Chairman.

Gentlemen, good to see you. Thank you for being here. This is the first question. MLP [Mobile Landing Platform], AFSB [Afloat Forward Staging Base], you mentioned that, General. I think we asked last NDAA [National Defense Authorization Act] to have some kind of a gap procurement from the Navy. It didn't go through. So if Congress finds the means to do that again to provide the moneys, is that good? I mean, do you want that? Do you need that, and can you put it to good use?

Secretary STACKLEY. Sir, I think you are specifically referring to advance procurement.

Mr. HUNTER. Yes.

Secretary STACKLEY. To be able to close the production gap at NASSCO [National Steel and Shipbuilding Company] associated with building the fifth of the MLP class, the third Afloat Forward Staging Base. The answer is, yes, it is desirable. You don't see it in our budget because, frankly, the appropriators have marked it out each time we have tried to put it in. So, for us, it is a challenge to put funding in if we know the appropriator is going to mark it out. So any assistance in that regard would be helpful to the industrial base, helpful to getting the capability earlier, but we recognize the challenge associated with the appropriators' view on that.

Mr. HUNTER. So I guess that kind of ties in too with amphibs, going from 38, which is the number that the Marine Corps and the Navy agreed upon that is needed to conduct the missions and the requirements from the combatant commanders throughout the world. Right? So you went down from 38 to 33. We really only have 31. You don't have MLP and AFSB on track right now because there is no advance procurement funding for it. Right? So they are semi on track. We have now closed three embassies in the last 6 years, had to evacuate them using Marines. You have less land-based places where you can now stage out of. Is that not a priority for the Navy and the Marine Corps to be able to operate? You can't operate out of the embassies. You can't operate off the land. You have to operate out of something. So what is the something? It can't be hope and good will. Right?

Secretary STACKLEY. Let me start that the AFSB we just talked about is the third of the three that are planned. So the first two are on track. The third one is on track in terms of its full funding. The advanced procurement would allow that to effectively be brought to the left a year. So that capability—

Mr. HUNTER. For the shipyard?

Secretary STACKLEY. For the shipyard, yes, sir. That capability, we place increasing value on it, particularly as—you have walked the ship—particularly as you see all the opportunity that it brings, all the lift capacity that it brings. I will let General Glueck describe exactly how the Marine Corps is looking at that in terms of forward operating base effectively to support Marine Corps operations. But it has held a high priority in terms of the Navy's budget since we started with the MLP program.

Mr. HUNTER. Let me ask it this way. Does it offset the number of amphibs that you need, having it, having a forward staging base like that, where you can lift and move? Does that offset the number of amphibs? Is that one reason for the lower number, or are they two totally separate things?

Admiral MULLOY. No, sir, it doesn't offset it. As a matter of fact, if you look at it, it is that the Force Structure Assessment will now actually go up to 34 ships because the LPD is being bought, and it actually modified that we have the third AFSB in. So they are not a substitute. What they are is enabler or other alternatives to put a special purpose MAGTF [Marine Air-Ground Task Force] on or other national mission forces. In fact, when the AFSB was initially designed, it was going to be to amplify mine hunting, and it

actually was initially designed for two MH-53s and mine-hunting gear. And there were going to be two of them. The value of that has now made itself very clear is that now what it can—we have designed to work with NAVAIR [Naval Air Systems Command]—can take four V-22s on the same flight deck. And it is much more readily able to take the Marine Corps on it and also and/or National Mission Forces. So it doesn't offset the need, and we view it now as it puts the third—with the 33rd—or, pardon me, the 12th LPD and the statement of now that is 34, we are closing that gap. It comes back to being, how much money do we have? We looked at it was AFSBs plugged into the workload of an industrial base of NASSCO and, as Mr. Secretary pointed out, was AP [advance procurement] would help. The ship will still execute. The first ship is christened on time, and we are looking forward to the AFSB getting out there, and where it goes it's still under review. It could be in Africa. It could be in the Middle East. But we know it will be helpful. Last summer, we took New York City [USS *New York* (LPD-21)] out of cycle to go to the Mediterranean to embark on a National Mission Force to catch a terrorist. Very quickly they used a ship of opportunity. That ship is now in the Middle East. So what did we have to do? We double-pumped that crew. They went over, embarked the special people, landed, took that individual back, who is now in court in New York City awaiting trial. The ship came back, did a maintenance period, and now it is on deployment.

The AFSB would give us the opportunity of having those AFSBs out there. You would still be able to embark Marines for rescue or special mission forces, and so that is how we view that ship in this important nest. And we are not detracting at all from the Marine Corps' requirement for amphib, sir.

Mr. HUNTER. Perfectly done on time in two, Admiral. Thank you. I yield back.

General GLUECK. Congressman, if I could add to that. What you, your numbers were correct, as you said, on the front, but the combatant commanders actually say the requirement is closer to 54. And I believe CNO has actually stated that, that is probably—he knows it is over 50. So when you only have—today, we are sitting with 31 amphibious ships, and you get a delta between 31 and 54, you know, we look at the AFSB and the MLP as ships that can help to fill that gap on the lower end of the military operational spectrum—not on the higher end. They have to be in a permissive environment.

Now, the first AFSB, the *Chesty Puller*, was actually just christened about a week and a half ago. In fact, General Dunford was out there for the christening ceremony. And we see a lot of capability, potential in that ship, but once again, it is going to have to be in a permissive environment. You know, I have worked up actually a CONOPS [concept of operations] for the Commandant; that is something we could possibly use maybe in the Gulf of Guinea to be able to expand our reach of the V-22s down in the southern region of Africa. Thank you.

Mr. HUNTER. Thank you, gentlemen.

Thank you, Mr. Chairman.

Mr. FORBES. The gentlelady from Guam is recognized for 5 minutes.

Ms. BORDALLO. Thank you very much, Mr. Chairman.
It is nice to be back on the Seapower Subcommittee.

Secretary Stackley, Admiral Mulloy, and General Glueck, thank you for your testimony today and for being here with us.

Vice Admiral Mulloy, I remember your service as Commodore of the Submarine Squadron 15 in Guam and your leadership during the successful dry-docking of the submarine tender *USS Frank Cable* in Guam in 2004, and it is good to see you again. Last year, MSC [Military Sealift Command] sent the submarine tender *Emory S. Land* from Guam all the way back to the United States West Coast for its overhaul.

Admiral, what is the impact on fleet readiness of sending ships from their West Pac [Pacific] AGRs[†] back to the U.S. mainland for dry-docking?

Admiral MULLOY. Yes, ma'am. Thank you for your question and your introduction, and also good to see you again. The impact ends up being essentially in time. It takes about 2 to 3 weeks to transit, get the crew acclimated and back, so we lose a month or two of that one. It is a constant balance of what we have to do. Our goal, as stated by the CNO, is to commit and maintain a robust ship repair and maintenance capability in Guam. They all look at the spectrum of ships. And as you pointed out, the tenders have done maintenance in Guam. In some cases, we send them back. It really depends upon the sheer amount of work that has to be done about a life extension on a ship. That is what we are studying right now, is what capacity we have to have forward versus back. But the actual loss of time is probably about 6 weeks of total time. It is really just the transit time it requires.

Ms. BORDALLO. Thank you very much, Admiral, for the information.

And, Secretary Stackley, in 2013, this committee raised serious concerns about the Navy's acquisition strategy to split pier-side ship repair from dry-docking depot-level capabilities in Guam. However, we understood that the dry-docking depot-level capabilities would be restored as quickly as possible.

In your July 2014 report on ship repair, you stated that this Navy is conducting a business case analysis [BCA] to develop options for providing a dry-docking capability in Guam. The results of this dry-docking capability BCA will be provided to Congress later this fall. Commander of U.S. Pacific Fleet has an operational requirement for a dry-docking capability in Guam. When can we expect to see the BCA, and when can we expect to see the dry-docking capability restored in Guam?

Secretary STACKLEY. Let me first describe that the BCA that was—the first go at the BCA, in fact, did not address whether or not the business case for a dry dock in Guam makes sense. What the BCA did was started with the assumption that there is a dry dock in Guam, and now, what do we get out of it in terms of value? So it did not answer the first questions that, frankly, the CNO needs answered, which is, what will it cost to recapitalize the dry-dock capability in Guam? What is the extent for usage? And there

[†]Ms. Bordallo submitted a correction for the record changing "AGR" to "AOR [area of responsibility]."

is going to be planning, and we also have to consider emergent need for the dry dock. And then, in that case, does that argue for the investment in that dry-dock capability? So, right now, that analysis is being reworked by Pac [Pacific] Fleet. It is owed to the CNO so that we can make the right investment decisions regarding the dry-dock capability.

Ms. BORDALLO. When will we see the analysis? What is the time-frame here?

Secretary STACKLEY. I will have to get back to you for the record, ma'am.

Ms. BORDALLO. All right. Thank you very much.

I yield back, Mr. Chairman.

[The information referred to can be found in the Appendix on page 71.]

Mr. FORBES. The gentleman from Virginia, Mr. Wittman, is recognized for 5 minutes.

Mr. WITTMAN. Thank you, Mr. Chairman.

Secretary Stackley, Vice Admiral Mulloy, and Lieutenant General Glueck, thank you so much for joining us. Thanks for your leadership.

Secretary Stackley, traditionally, as you look at aircraft carrier buys, we have done them in two-ship procurements. And as you know, in the President's budget for 2016, the proposal is for advanced procurement on CVN-78 in a 1-year timeframe and potentially moving CVN-79 to the right. We have seen with *Arleigh Burke*-class destroyers, as we purchase ships in groups, we have seen about a 15 percent savings when we do that just because of certainty, especially for suppliers for those ships, especially aircraft carriers. Is there any consideration given to grouping advanced procurement on CVN-80 and CVN-81? And give us your perspective, too, potentially on movement to the right of CVN-79.

Secretary STACKLEY. Let me start with the advanced procurement for CVN-80 and CVN-81. There is strong argument for why that makes great sense. When you are procuring an aircraft carrier about once every 5 years and you are relying on a very unique industrial base to do that, what you don't want to do is go through start-stop-start-stop cycle over a stretched period of time, and that is a big cost impact. The challenge is, by the same token, the build cycle for a carrier is greater than 10 years. So CVN-79, for example, she started her advanced procurement in 2009, and she will be delivering to the Navy in 2022. So that is a 13-year period. So when you talk about doubling down on buying the material to support two carriers 5 years apart that have a 13-year build span, you are trying to buy material as much as 18 years ahead of when the carrier went to the fleet. It makes great sense looking at it just from the program's perspective on why we want to do that to drive the cost of the carrier down. There is risk associated with things like not necessarily obsolescence but change associated with a carrier because the threat changes and that brings change and then the investment that far in advance of when the asset actually enters the fleet. As the acquisition guy, I will argue for why we need to do that, but getting through, carrying that argument all the way through to say that we are going to take the 80, which is the 2018 ship, the 81, which is a 2023 ship, buy material early for that 2023

ship delivering to the Navy in the mid-2030s, that is going to be hard for me to carry the day in terms of our budget process. So we have to have the compelling case for the specific things from an industrial-based perspective, from a move-the-needle—move the needle from a cost perspective—to justify the combined buys of 80 and 81 together.

Mr. WITTMAN. Well, it seems like, even if the scale is an issue as far as how much you would have to expand to do that and manage that within the budget, you could at least then identify those critical suppliers that look for certainty to make sure that they can continue providing those specialty parts, and if you could at least pare it down, again, at a critical mass to where you can demonstrate economies of scale of saving, that you could at least say these are the areas we need to maintain this industrial base, especially for small-scale suppliers that rely on certainty to continue that effort. So have you all given any thought to be able to scale it at least within that area, maybe not to get 15 percent savings, but still create certainty and make sure the suppliers are there but also—

Secretary STACKLEY. Yes, sir. We have a very concerted effort going on between the Navy and Newport News on all things cost-related to the CVN-78 class for all the right reasons. We are looking ahead at 80, which is a 2016, the advance procurement starts in 2016 for the 80. Most of that is going to be nuclear material. But Newport News has brought the initiative to the table in terms of combined buys for material. And now we have to sort out, can we, in fact, come up with the right list of material that makes sense to buy early, to buy combined, to get the savings, and not just people promising savings in the end, but to actually be able to book the savings so we can drive down the cost of those carriers? So I would say that we are working with industry on that. We have got a long way to go to be able to carry the day inside the budget process; first, inside the building, and then, again, I will tell you, we are going to have some challenges convincing some folks on the Hill that this makes sense to invest this early in a future aircraft carrier.

And the other question you had about the CVN-79 schedule. CVN-79 is the replacement for the *Nimitz*. We have two things to struggle with. One is we want to build it earlier from the standpoint of efficiency with the shipyard. However, if we build it early, deliver it early, then we have an overlap between the 79 and the retirement of the CVN-68. What we can't afford to do is ramp up one extra aircraft carrier crew for a couple-year period. So what we are doing is we look at that as schedule flexibility. We are going to try to drive the CVN-79's construction to the left for efficiency purposes, but then we are going to look for a window, a second phase in the build process for the carrier, where we are going to bring in electronics, the electronics systems that will be obsolete if we were to buy them early. So we are going to buy them as late as possible, install them as late as possible, so that that the systems that we install are, in fact, state-of-the-fleet at the time that the carrier delivers.

Mr. WITTMAN. I think that is the key to make sure that the overlap is there so as *Nimitz* retires and the CVN-79 comes on board,

we don't good through the situation we were with *Ford* and *Enterprise*, to make sure we don't have a gap there.

Mr. Chairman, thank you so much. I yield back.

Mr. FORBES. Thank the gentleman.

Mr. Langevin is recognized for 5 minutes.

Mr. LANGEVIN. Thank you, Mr. Chairman.

Secretary Stackley, Admiral, General, thank you all for your testimony and all that you do to protect our Nation. I would like to start by expressing my appreciation for the significant efforts that the Navy has made to really push the art of the possible when it comes to cutting-edge technologies, be it directed at energy where the *Ponce*'s deployment is teaching us so much right now or the work being done to test railgun at sea and possibly integrated into the third *Zumwalt* destroyer or the UCAS-D [Unmanned Combat Air System Demonstration] program's work on pushing the state of the art in unmanned carrier aviation. These are exactly the sorts of investments that we absolutely have to have to protect and allow to mature to enable the Navy that we will need in the future. I know this is something the chairman and the ranking member care deeply about, about giving us our future Navy today wherever possible. To our panel, let me just in particular ask, the Navy has projected a significant shortfall of land-attack cruise missiles capability with the retirement of the guided missile submarines in the 2020s. To address this shortfall, Navy has proposed to expand the *Virginia*-class submarines to accommodate additional land-attack cruise missiles capability beginning with Block V. However, even this effort in assuming that all the payload space is used for land attack will leave us significantly short relative to today's at-sea capacity. My questions are what options exist to mitigate the shortfall and accelerate the introduction of the *Virginia* Payload Module [VPM] capability? And can you also please describe industry's ability to potentially accelerate the design, production, and the fielding of *Virginia* Payload Modules should additional resources be provided. What would be the earliest boat that could include VPM if it we were accelerated?

Secretary STACKLEY. Let me start by describing that our design activities were all geared toward the first boat of the next multi-year, which is in 2019. We have posed to the design team, come back and tell us, is it possible to accelerate that? That is an answer that I owe you later this spring in terms of what that would comprise. You have hit it exactly in terms of the capacity that leaves when we lose the four GNs [SSGNs]. More than just the possibility of accelerating VPMs by a year, the other thing we have to work through is the total volume of work that the submarine industrial base will be taking on during the decade of the 2020s to determine between our build rate for *Virginias* side by side with our build rate of *Ohio* replacement, alongside the *Virginia* Payload Modules. In that equation, is there the ability to, in fact, increase VPM production because right now we are planning on one *Virginia* per year with VPM beginning in 2019. So we are looking at, first, can we pull that to the left a year, and then the other thing, the other aspect is what would be our ability to increase the rate of production of VPMs beyond one per year, which is in our current long-

range plan. Affordability comes into play. Industrial-based capacity comes into play, and it is too early yet to call that.

Mr. LANGEVIN. Thank you. Going back to the subject of directed energy, obviously these systems have numerous applications on a variety of different ship types. Which PEO will be the lead organization for oversight and execution by shipboard laser systems?

Secretary STACKLEY. Right now, laser systems right now are being developed under the direction of the Office of Naval Research. They will get up to a certain level of technology maturity. Inside of the Naval Sea Systems Command, we have a program organization called Electric Ship's Office, which includes a power system to support directed energy. Ultimately, a PEO for Integrated Warfare System would take on a responsibility for directed energy, and then the shipbuilding program would have responsibility for the shipboard side of integrating that weapons system just like we do today with other conventional weapons. So, Office of Naval Research today, working with our Naval Surface Warfare Center down at Dahlgren, Virginia, transition technology, when it is mature, to PEO IWS [Integrated Warfare Systems], working with PEO Ships, most likely, for integration on a future ship program.

Mr. LANGEVIN. Thank you, Mr. Chairman. I yield back.

Mr. FORBES. Thank you, gentlemen.

The gentlelady from Missouri, Ms. Hartzler, is recognized for 5 minutes.

And before you, if you would just suspend for a moment, to our panelists, we are going to have votes, and we are going to have to recess for about 40 minutes. Are you guys okay with coming back? We have two of our members that have questions they would like to ask if you don't mind doing that.

So Ms. Hartzler will be our last questioner at this time.

Mrs. HARTZLER. Thank you, Mr. Chairman. Just quickly, you said in your testimony that with the shift to the Pacific, by 2020, did you say there would be 60 percent?

Admiral MULLOY. Approximately 60 percent of the fleet.

Mrs. HARTZLER. Okay. I also read that if sequestration happens, you won't be able to have an aircraft carrier in the Mediterranean. Is that correct?

Admiral MULLOY. Right now, ma'am, the Mediterranean is covered on transit protection. We are still looking at, as I mentioned in my opening, the full extent of the Budget Control Act [BCA] impacts on Navy would require an adjustment of the entire joint force. So right now we are able to supply what we call 1.0 presence in the Central Command in the Persian Gulf area around Saudi Arabia and approximately a 1.0 presence in the Pacific. What we provide presence in the Mediterranean and the Atlantic is what we call transit presence if we are moving through. But in a world situation—when Crimea was invaded, the carrier delayed in the Mediterranean before it went into the Middle East, and we then did a 2-week extension of the carrier in the Med—pardon me, in the Central Command so that we still had that overlap. Our plan would still remain the same. For a long-term operation in a BCA level, I cannot tell you what carrier presence would be. We are taking a look at what opportunities are out there, but what I will tell you is it remains bleak unless there is a fundamental change in strat-

egy to what we have to do for the carrier presence around the world.

Mrs. HARTZLER. Thank you.

Can you give me an update on the refueling of the *George Washington*?

Admiral MULLOY. Do you want to start that, sir?

Secretary STACKLEY. I would just say we signed the planning contract with Newport News in February. There is a 30-month planning window. So this is all the design activities. We start the material procurement to get everything in line so that when the *GW* [*George Washington*] shows up at the shipyard, she would start her nominally 44-month refueling complex overhaul [RCOH]. So that would be notionally the July 2017 timeframe would be the start of the RCOH, and it is pretty important we track to that schedule because what we want to do is minimize the extent of overlap with the next aircraft carrier, which is the *Stennis*. So if that RCOH starts much beyond July of 2017, then we get concerned about the combined 73/74 RCOHs at Newport News during that period.

Mrs. HARTZLER. And lastly, can you compare the building of our submarines compared with what China is doing as far as building submarines, the numbers and capability?

Admiral MULLOY. I would have to come back to you with a correct answer about how many they built per year, but on whole, they are producing submarines. They may not be the same quality, but their submarine forces are growing over at a tremendous rate. They now have more diesel and nuclear attack submarines than we have. So they have passed us in total quantity, but in quality, they are still not there. But they are producing some fairly amazing submarines, and they are actually deploying them. They have now had three deployments into the Indian Ocean. They are expanding where their submarines go. And of great interest, we know one SSBN [ballistic missile submarine] was on an equivalent—we don't think they have nuclear weapons on board, but we have seen them producing the missiles and testing them. One SSBN did a 95-day period at sea, equivalent of a long patrol. So we know they are out experimenting and looking and operating and certainly want to be in this world of advanced submarines.

Secretary STACKLEY. I would highly recommend a classified threat brief for the members of the subcommittee so we can go into detail so we can see beyond just submarines the level of activity that China has in terms of modernizing its force.

Mrs. HARTZLER. Absolutely. Thank you very much.

I yield back, Mr. Chairman.

Mr. FORBES. And, with that, we are going to recess for about 40 minutes until these three votes are over, and we will come back and finish up with our last two questions.

[Recess.]

Mr. FORBES. Gentlemen, first of all, thank so much for your patience in working with us on this. As you know, they don't call us and ask if these votes are convenient, but we appreciate you working with us.

Now I would like to recognize the gentleman from California, Mr. Cook, for 5 minutes.

Mr. COOK. Thank you very much, Mr. Chairman.

And thank you very much for coming back. My question relates to what you are talking about, but I just got back from—we went to NATO [North Atlantic Treaty Organization], and we had a brief over there, and then we were in Turkey. And I am concerned about, you know, whether we are—and the number of platforms that we have, you mentioned how they are going to be diminished and yet the tempo of ops [operations] and the op plans and everything else, it is one after another after another. And it is like, can we actually cover all these contingencies or all these spots? When I was in NATO and they put the fear of God in me about Putin and, quite frankly, Estonia, Latvia, and Lithuania, and whether we have the platforms. Obviously, we discussed the Med [Mediterranean], but I was thinking of the Baltic, which I thought was a very, very shallow area that is limited in terms of what you could bring in there. But they have been running operations. And, of course, as somebody that is involved in NATO, the big threat is the attack on one of those smaller countries way at the end, close to Russia.

Do we factor that into the platforms or maybe I have the misconception that we are building everything for—everything all over the world and whether we have to be more selective in our future plans based upon the contingency or the threats as they are evolving? You know, I don't mean to dwell on it too much, but 5 years ago, 10 years—you know, the Berlin Wall came down, and it is safe there. We are doing Kumbaya; everything has changed in a remarkably short period of time. So could you address that, please?

Secretary STACKLEY. I will start and ask for Admiral Mulloy and General Glueck to add.

Let me first describe that when we design our ships, when we set the requirements and do the design, we are looking at a ship with a service life that is going to extend 30 to 40 years on average. It is impossible to anticipate all the types of operations that any ship is going to be called upon in that service life. So, to the extent practical, we look for general purpose designs to be able to configure and be employed to deal with the full range of operations that the ship will be called upon.

With specific regard to the regions that you have just described, where you have to deal with shallow water, restricted areas, and what we refer to as the littorals, in fact, earlier, about 10 years ago, we embarked on this thing called the Littoral Combat Ship, specifically a shallow draft, a modular design so you could have payloads that you could flex and adjust to depending on what the mission was to deal with those regions where our larger capital ships, from destroyers, cruisers, carriers, et cetera, would not be able to penetrate.

In general, we look for general purpose ships that you can adjust their mission as the threat moves with specific regards to those regions where our larger bluewater Navy was not designed for operations. We did add to our fleet the Littoral Combat Ship that has that shallow draft, modular payload capability and, frankly, speed, which is your ally in those close-in regions.

Mr. COOK. Didn't we cut back on those though? In terms—

Secretary STACKLEY. No, in fact—

Mr. COOK. Are we going forward with the—

Secretary STACKLEY. We capped the modular version of the LCS at 32 ships. Frankly, the Secretary of Defense was concerned that we were going to build out to 52 LCSs, that would be one-sixth of our entire battle force being this modular configuration. So he tasked us with coming back with something that is, quote-unquote, more frigate-like, more multimission. And so, in fact, what we have going forward, first 32 ships will be the modular Littoral Combat Ship; the last 20 will be a multimission—still some modularity, but a multimission modified version of the LCS that gives it a wider range of operations.

Admiral MULLOY. The only other part I would add, sir, as we look at the changing demographics of the world, the threat does morph in where we have to go, but as Mr. Secretary Stackley pointed out was the ability of our ships to flex in terms of payloads and weapons. So the concern on deployability and the combatant commanders, you are absolutely right. And that is one reason why, as I mentioned earlier, PB-16 [President's budget request for fiscal year 2016] is the minimum to be able to do this. We need the funds to go take our 285 ships right now and build them to 308 by the end of FYDP to be able to continue to support that.

Ten years ago, we had 300-something ships, but we only had about 70 deployed. Now we have 100 deployed out of 300—or 280 ships. So we are at the point of a ship comes back and immediately it rests, it does maintenance, and it just recycles back again to deploy. And so all the combatant commanders want them. So it is important that PB-16 reflects we need to keep building ships; we need to continue to maintain them; and we need to be able to make them available. And that is so really the combatant commanders to develop war plans or option plans with them, but the response is there. Within a short period of Crimea attack, we had a DDG [destroyer] in the Mediterranean. Within a short period on ISIL [Islamic State of Iraq and the Levant], we responded with an aircraft carrier. And for the first 54 days until we had country clearance, the only people bombing and attacking were American airplanes off of an aircraft carrier. So the flexibility of Navy and naval research, naval support vessels is so the Navy and Marine Corps team can respond very flexibly.

Mr. COOK. Thank you.

General GLUECK. About 10 years ago, we used to have a Marine Expeditionary Unit that was deployed with their Amphibious Ready Group to the Mediterranean, but due to lack of capacity now, they are no longer stationed there. About the only opportunity you get is when they pass through, perhaps on their way to CENTCOM [Central Command]. I mean, that is a great opportunity; having been a new commander during that period of time, that is a great opportunity to build partnerships with our coalition partners over there, members of NATO, to exercise with them, to check our interoperability and be able to demonstrate that cohesive team that we have.

Mr. COOK. Thank you.

Mr. FORBES. The gentleman yields back.

Ms. Gabbard is recognized for 5 minutes.

Ms. GABBARD. Thank you very much, Mr. Chairman.

Gentlemen, thanks for your service and for being here today with us.

I just wanted to ask about a problem that I think is well-known and well-recognized, as we try to find the appropriate and effective solution to bring our Marines to shore safely, quickly, and from farther distances than I think ever before. As we look at some of the solutions that are being offered, I know there are many people who are working towards that. So far, it seems to be done on a little bit of an ad hoc, kind of scattershot way where certain people may be bringing solutions to one element or another, but really are not focusing on overall integration.

I know of some who are working to go solve the high water speed problems specifically in working with the Marine Corps in order to figure out how to do that. But my question is, how can the Marine Corps leverage existing research and investment in existing capability, specifically talking about the ACV [Amphibious Combat Vehicle] to help design the next generation?

Lieutenant General, please.

General GLUECK. Thanks for the question. It is really about the integration of all these capabilities. It is a family of systems is what we are talking about, and that has been our approach as we have come up with our capstone concept of Expeditionary Force 21. It is about that family of systems out there that is going to give us that leap-ahead capability.

If you remember in my opening comments, I made a point about there is not going to be any one transformational capability that we are going to see over the surface. It is going to be the capabilities that exist today and how we better integrate them together to be able to give us that leap-ahead capability.

So, for example, in a sea base, as you talk about where, due to the A2/AD [anti-access/area denial] threat, the sea base is actually getting pushed out further. And it is going to depend on the time and place as to how far that sea base will have to go. Within that sea base, not only will it have naval surface combatants, but you are also going to have members of the Maritime Prepositioned Fleet. So the AFSB, the MLPs, the Joint High Speed Vessels, and those are all going to be integrated because they are going to have a capability that we need at the sea base, where we are able to do at-sea arrival and assembly of the force in the sea base and be able to transfer those loads between combatant ships and some of the Maritime Prepositioned Ships. That is a real leap ahead. We are pushing full speed ahead on that and working into experimentation.

Our concept is really, has been for the past 25 years, ship-to-the-objective maneuver. So your sea base can move around. You launch your vertical assault and your surface assault from wherever you move the sea base to. So, as we move to the future, actually, when we came up with the concept, there were actually three—it was called the triad. And it was the LCAC [Landing Aircraft Cushion]; it was the V-22; and it was the AAAV [Advanced Amphibious Assault Vehicle also known as Expeditionary Fighting Vehicle, EFV] is what we were looking at. Those were the three capabilities that we needed to be able to perform that.

As you know, today, the V-22 is a success story. And so that, from a vertical perspective, we can go ahead and insert forces hundreds of miles behind enemy lines and be able to do that.

On the connector side, on the surface side, it is really going to come down to connectors—connecting from the sea base to get to the shore. So how we best integrate those capabilities to get the greatest effect. Once again, we are not going to go ahead and try to find where the enemy is strongest. We are going to find where the enemy is weakest, and that is where we exploit it. So, I mean, when you look at the family of systems over the surface, you are talking about the LCACs, the LCUs [Landing Craft Utility]; you have got the Joint High Speed Vessel, which we are doing some research on right now to be able to put a ramp on it so that we could potentially launch vehicles while at sea with the Joint High Speed Vessel. And then, of course, we are going to modernize our AAVs, about 392 of them. And the ACVs will take up the rest of our—not the amphibious lift but provide us the armored lift we need once we get ashore.

Ms. GABBARD. Thank you.

Do you have any additional comment on that?

Secretary STACKLEY. I think General Glueck covered it pretty well. The only thing I would add is he touched on the LCACs. In fact, we have gone through a service life extension for the LCACs, and this year, we are moving forward with the next—what is referred to as ship-to-shore connector. And that features prominently in our budget across the FYDP as we ramp up production for that new connector.

Ms. GABBARD. Thank you. Thank you, Mr. Chairman.

Mr. FORBES. Gentlemen, once again, thank you so much for being here. I know we are living in some very, very dangerous times, very frustrating times. We appreciate you guys hanging in there and doing the work that you do.

I also note, sometimes in a hearing like this, as you know, the important thing for us is preparing this transcript so we can use it for our markups. Our members are wonderful members, but they each run in different lanes, and they may have unintentionally left out something that you think is very important that we need to get on that record.

So I would like to give each you a few minutes to wrap up in any way that you need to anything that you feel you need to clarify or that we didn't get on the record.

Just in that process, the only thing I would ask you to do is share a little bit about the cruisers and where you see us going with those. We have expressed a concern that perhaps we may—we don't see that in the POM [Program Objective Memorandum] and that gives us a little bit of concern. But I would like to make sure that we are committed to that modernization to do it.

Admiral Mulloy, if we could start with you, and thank you once again for being here, and any closing comments you would like to offer.

Admiral MULLOY. Well, first, thank you, Mr. Chairman. I would like to close with—and I will get to the cruisers—is that, as we pointed out, was sequestration or any attempt to adjust to a BBA [Bipartisan Budget Act] law for 2016 we find would be highly detri-

mental to the Department of Defense and especially the Department of Navy. We have a number of items that we continue to move ahead in this Navy. The LCS is important to us. The *Ohio* replacement program we have already talked about.

So the whole gamut of what the fleet is laying in those aircraft carriers, and what I look for as the Navy's chief financial officer is adequate, predictable, and timely budgets. So far, we barely got adequate, and it has been real efforts out of this committee and other committees to make sure that we have something, but what they defined as being adequate is \$25 billion short.

Predictable is not very high, except the one year that we had the 15 is now I view as a high water mark of stability, but it is \$11 billion short of where I told us, you know, it needed to be. So I don't need more predictability that. I will be like General Pyrrhus in Southern Italy here in 479 facing the Romans, and one more battle like this, I am lost.

And I need a timely budget. It has certainly been less of a shorter CR [continuing resolution] this year, but I was budget officer for 4 years and was N8 for another one, and every year, we have had a CR of various lengths. So we need to move ahead on that. We really need to have it.

I appreciate your process, Mr. Chairman, and your committee to move ahead this year to say, we are going to move ahead of budget.

When I look at the cruisers, I will tell you everyone—we are all in on doing that. We have two ships that we are starting this year; we have two more. There was a question about what do we do when that law came out—2/4/6. When that law finalized in early December, we had about 1 week to lock this budget. In that period of time, we could not use the SMOSF [Ship Modernization, Operation, and Sustainment Fund] where we were planning to use it for operations and maintenance. The Navy made adjustments as we locked the budget to add just a little bit under \$500 billion for operation and maintenance for the other seven ships that we expected to be in this phased modernization program, but not. So we adjusted the program to fit and comply to the law, the SMOSF fund will pay for modernization through the FYDP. What we have to go back now and look at as we develop the next POM—and we are looking for signals from the Hill—would be is are there other additions to SMOSF? Then can we count on that account? And what can we do about trying to support this law, because we acknowledge that we want the ships; we are taking care of them; and we need that cruiser plan. But we also want to make sure we extend the life of them so that we can have those cruisers for a long time, sir.

Mr. FORBES. Thank you.

General Glueck, thank you, again, for all your service and for being here. Any closing comments you would like to get on the record?

General GLUECK. Yes, sir, Mr. Chairman.

Last year I requested your support in funding flexibility for the Amphibious Combat Vehicle way ahead. Because of your support, the Amphibious Combat Vehicle program is poised for successful transition to our RFP [request for proposal] by the end of March.

Secondly, I requested your support on the development of high water speed capability through an aggressive science and technology program, and that is moving out smartly.

Lastly, I requested your increased amphibious ship investment in both platforms and maintenance. Today, we have a funded LPD-28, a defined way ahead on the LX(R), and programmed approximately \$1 billion dollars for amphibious maintenance modernization across the FYDP. So I want to say thank you.

But I also come with my hat in hand. This year, I request your support in both continued amphibious ship and ultimate platform investment, particularly in the LX(R) and the increased capability of LHA-8; continued support of our combat vehicle strategy to replace supporting 40-year-old-plus AAVs that we have in the inventory; and lastly, your support for science and technology continued efforts to gain high water speed. Thank you.

Mr. FORBES. Thank you, General.

Mr. Secretary, we will give you the final word.

Secretary STACKLEY. Yes, sir. Very briefly, we spent a lot of this hearing discussing concerns with sequestration, the impact of sequestration. What we have delivered to the Hill is the program, the budget, that we believe is essential to meet the Nation's security requirements from the Navy-Marine Corps perspective. The impact of the last several years of 2013 sequestration, the BBA's impact in 2014 and 2015. You have heard us describe that we pulled away from the capabilities that we believe we need, either in terms of timeliness or in terms of capacity, and it has had a similar impact in terms of the industrial base.

So, first and foremost, we want to provide you the information and the armor that you need in order to fight the sequestration and BCA in 2016 and out. Our first priority is to hold onto the program that we have delivered to the Hill. And we want to provide you the best information that you need to be able to support that.

Much of this hearing has been on shipbuilding. That is the nature of your Navy-Marine Corps team. We are on path today to get to a 300-ship Navy by the 2019 timeframe. In the interim, we are working our ships hard. The deployment ratios, their dwell time, the length of their deployments, is bringing a lot of wear and tear to the force and you are starting to see that stack up in the depots. So the ship count is critical because the demand for presence is not going to go down. So you have been our partner for your time here on the committee in terms of supporting our shipbuilding requirements, and we look forward to continuing down that path. We need these ships. Their demand overseas is not going to go down. It is only going to increase when you look at the 2020 timeframe. We are not looking at 100 ships being deployed. We are looking at 115 ships deployed. And the greatest challenge, the greatest threat we have to that today is the threat of sequestration. So let us know how we can help you in your battles here in the halls of Congress to try to reverse what poses a great threat to our Navy-Marine Corps team.

Mr. FORBES. Thank you all. Thank you for all the team that worked with you. And to members of the committee, thank you.

And, with that, we are adjourned.

[Whereupon, at 4:19 p.m., the subcommittee was adjourned.]

A P P E N D I X

FEBRUARY 25, 2015

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

FEBRUARY 25, 2015

**Opening Remarks of the Honorable J. Randy Forbes
for the
Seapower and Projection Forces Hearing on
Department of the Navy Fiscal Year 2016 Budget Request for Seapower and
Projection Forces
February 25, 2015**

I want to welcome all of our members and the distinguished panel of Navy and Marine Corps leaders for today's hearing.

We have testifying before us on the fiscal year 2015 budget request:

The Honorable Sean Stackley, Assistant Secretary of the Navy for Research, Development and Acquisition;

Vice Admiral Joe Mulloy, Deputy Chief of Naval Operations for Integration of Capabilities and Resources; and

Lieutenant General Kenneth Glueck, Jr., Deputy Commandant for Combat Development, Integration, and Commanding General of the Marine Corps Combat Development Command.

Thank you all for testifying today and we look forward to your thoughts and insights on these important issues.

As to the FY16 budget request, I believe that the budget request is a good step forward to support our national defense but I am concerned that the overall administration's request does little to obviate the impact of sequestration. Unless this administration and Congress can begin meaningful negotiations on overall national budget direction, I am fearful that sequestration will continue doing grievous and long lasting harm to our national security. At a time of increased instability around the world, both in Iraq and Syria and countless locations throughout the world, it is time to place our service members before any partisan ideologies and ensure that our national security is secured.

As to specific elements of the budget request, I continue to have concern about the submarine industrial base and the significant workload that stands before us. The 30-year shipbuilding plan presumes a stiff ramp in FY19 with the start of construction of the Ohio class replacement program. This effort will require an almost 50% increase in our overall submarine industrial capacity. I think that we should review options to better manage the industrial base and to accelerate collateral submarine investments like the Virginia Payload Module.

I am also concerned about placement of up to 6 cruisers in this so called “phased modernization” plan. I continue to view with great skepticism the Navy’s intent to put these cruisers into a long term layup status and I am not confident that the cruisers placed into this status will ever return to active service. I look forward to the Navy explaining to this subcommittee how reducing our cruiser force structure by 25% increases our national security.

As to the Marine Corps, I am also concerned about our amphibious lift capabilities both in terms of large deck amphibious ships and their supporting assault vessels. As to the large deck amphibious ships, I want to understand how stripping down a successful LPD-17 hull builds the requisite capability for the Marine Corps in the new LX(R) procurement plan. I also want to understand how the combination of Joint High Speed Vessels, Amphibious Combat Vehicles, LCAC and ship to shore connectors work in concert to support a combined lift effort. I believe we need to have some assurance that these programs are sufficiently resourced and are integrated into the overall defense plans.

Finally, I want to commend the Navy and Marine Corps team for continuing to place an emphasis on industrial base stability to the ship construction accounts. I think the overall acquisition plan that provides block procurements of essential national defense elements like the Virginia class submarine and Arleigh Burke class destroyer serve as a credible strategy to provide essential capabilities at a reduced cost. When we discuss acquisition reform on this committee, I can think of no better reform effort than to couple a long term procurement strategy with a stable appropriation stream. Building for the long term using stable requirements saves money.

Once again I want to thank our witness for participating in our hearing this afternoon and I look forward to discussing these important topics.

With that, I turn to my good friend and colleague, the ranking member of the subcommittee, Joe Courtney.

**Opening Remarks for Congressman Joe Courtney
Ranking Member
Seapower and Projection Forces Subcommittee
FY16 Navy Budget Request for Seapower and Projection Forces
February 25, 2015**

Thank you, Mr. Chairman. This is my first public hearing as ranking member, and I am looking forward to working with you and our colleagues on the panel to continue the bipartisan and hands-on tradition of this subcommittee.

In addition to welcoming our returning members back to the subcommittee, I would like to highlight three new members on our side of the aisle who I think will make excellent contributions to our work this session: Tulsi Gabbard of Hawaii, Gwen Graham of Florida, and Seth Moulton of Massachusetts.

I would like to thank Secretary Stackley, Admiral Mulloy and General Glueck for being here today and for their service. I can think of no better collection of witnesses to get us started on our review of the 2016 budget.

Overall, I am quite pleased with the Navy's portion of the President's 2016 budget as it pertains to the jurisdictions of this subcommittee. In my view, the Department of the Navy's proposal presents a balanced mix of new procurement, modernization and development. I remain concerned, however, about the looming impact of sequestration on the Navy's plans. Our committee has heard time and again the harmful impact that these mindless across the board cuts will have, and I remain hopeful that this Congress can address this problem.

With regard to shipbuilding, the budget includes nearly \$17 billion for nine ships and plans 48 more across the future years defense plan. For 2016, the budget supports critical work on our carriers, destroyers, small surface combatants and fleet support ships, and continued development of other important future ships. The last few years have seen a significant number of new ships put under contract and commissioned into service, and I look forward to continuing to make progress towards meeting the near and long term goals of our shipbuilding plan.

I am, of course, pleased to see the continued procurement of two Virginia class submarines in 2016 and beyond, as well as a continued commitment to the development of the Virginia Payload Module (VPM). VPM will help mitigate the loss of undersea strike capability currently on the horizon when the current fleet of SSGNs retire. I would note, however, that the Navy budget plans for only one of the two submarines to be procured in 2019 and 2020 to be VPM-enabled. If there are potential ways to further mitigate the gap in undersea strike capabilities, I would be interested in hearing more about that and how Congress could possibly help.

One of the most pressing challenges the Navy faces remains the strain that the Ohio Replacement program will place on our shipbuilding plan without topline relief. There is no question this new capability is essential to our nation's security, and any further delays present unacceptable risk.

That is why there needs to be a clearly laid out plan for how these ships will be resourced that well understood by both the Department and Congress.

In the FY15 NDAA, Congress—led by this subcommittee on a bipartisan basis—created the National Sea Based Deterrence Fund as one option for addressing this concern. I would be very interested in hearing from the witnesses as to their thoughts on utilizing this approach—or their ideas on additional approaches or authorities—to ensure that we can fully resource this multi-generational investment with our other shipbuilding priorities. Our nation has successfully met this responsibility in prior SSBN recapitalization efforts, and I am confident that we can do so again.

The Navy just recently briefed me on the way ahead for implementing the phased modernization plan for cruisers and LSDs as directed by Congress last year, an area again in which

this subcommittee was directly involved. At first look, this plan seems to present an achievable way of modernizing 11 Navy cruisers and LSDs while also extending the life of the cruisers to ensure the Navy has a capable ship well into the 2030s. I know this subcommittee will continue to examine that plan and I look forward to learning more about the details.

On the Marine Corps side, I was particularly pleased that Congress and the Navy were finally able to come to an agreement on the 12th San Antonio class amphibious ship. These are impressive ships, and this 12th LPD will not only increase the already stressed Marine Corps lift requirement but will also help to be a stable bridge to LX(R) now that the decision has been made to stay with the same hull form.

Finally, I am increasingly concerned with reports that a number of ship and submarine availabilities are experiencing significant delays and the impact that has both on our industrial base on the day-to-day operational needs of the Navy. There are reports that some planned availabilities may be shifted from the public shipyards to the private yards in order to relieve the backlog. I would be interested in hearing what impact, if any, these shifts might have on new construction and the ability of the private yards to level their workforce to meet the additional demands.

Once again, I want to thank all of the distinguished witnesses for being here today and I look forward to hearing their comments.

NOT FOR PUBLICATION UNTIL RELEASED BY THE HOUSE ARMED SERVICES
COMMITTEE SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

STATEMENT

OF

THE HONORABLE SEAN J. STACKLEY
ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, DEVELOPMENT AND ACQUISITION)

AND

VICE ADMIRAL JOSEPH P. MULLOY
DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRATION OF CAPABILITIES AND
RESOURCES

AND

LIEUTENANT GENERAL KENNETH J. GLUECK, JR
DEPUTY COMMANDANT
COMBAT DEVELOPMENT AND INTEGRATION &
COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

DEPARTMENT OF THE NAVY SEAPOWER AND PROJECTION FORCES
CAPABILITIES

FEBRUARY 25, 2015

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. Chairman, Representative Courtney, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address the Department of Navy's seapower and projection forces capabilities.

The Fiscal Year (FY) 2016 President's Budget submission is governed by the 2014 Quadrennial Defense Review (QDR), which implements the 2012 Defense Strategic Guidance (DSG) and continues our efforts to ensure our ability to protect the homeland, build security globally, and project power and win decisively. In balancing resources and requirements, the Department continues to place a priority on maintaining a sea-based strategic deterrent, sustaining forward presence, strengthening our means to defeat and deny aggression, focusing on critical readiness, sustaining or enhancing our asymmetric capabilities, and sustaining a relevant industrial base, including providing stability in our shipbuilding programs. The Navy and Marine Corps remain well suited and uniquely positioned to perform the missions of the DSG, including appropriate readiness, warfighting capability, and forward presence. Our principal requirement remains to equip the Navy and Marine Corps with the most effective warfare systems, through procurement, modernization, and sustainment, to address the security challenges of today and tomorrow. These principles guide the priorities and direction of the Department's FY 2016 President's Budget request. The Department will continue to work closely with Congress to maintain the right balance across capacity, capability, readiness, and the industrial base.

Though budget issues have challenged the Department, our Sailors and Marines deployed around the world continued to perform the mission and operate forward, being where it mattered when it mattered. Among these missions, the *George H.W. Bush* Strike Group relocated from the Arabian Sea to the north Arabian Gulf and was on-station within 30 hours, ready for combat operations in Iraq and Syria. Navy and Marine strike fighters from the carrier generated 20 to 30 combat sorties each day for 54 days to project power against the Islamic State of Iraq. The *George Washington* Strike Group also provided disaster relief to the Philippines in the wake of the Supertyphoon Haiyan approximately a year ago. *USS Truxton* established a U.S. presence and reassured our allies in the Black Sea within a week after Russia invaded Crimea. *USS Fort Worth*, on her maiden deployment, joined *USS Sampson* in support of the Indonesia-led search effort for Air Asia flight 8501 within days of arrival in theater.

Marine Corps units deployed to every Geographic Combatant Command (GCC) and executed numerous Theater Security Cooperation (TSC) exercises to help strengthen

relationships with allies and build partner capacity. Marine Corps Special Purpose Marine Air-Ground Task Force (SPMAGTFs) and ship based Marine Expeditionary Units (MEU) also responded to emergent crises in Sudan, Iraq and Libya, and most recently off the coast of Yemen to participate in strikes or reassure American allies. Innovative force packages were provided to the GCCs with Special Purpose MAGTF Crisis Response for the Middle East and Africa. These fully capable ground-based MAGTFs responded to crisis when called upon in a matter of hours to reinforce or evacuate embassies in South Sudan and Libya. Furthermore, in December, the Marines turned over control of Regional Command Southwest and redeployed its last combat forces from Afghanistan, and remain committed to support the continuing North Atlantic Treaty Organization efforts.

The Department maintained a steady pace of over 200 engagements, more than 30 amphibious operations, 150 TSC events, and 130 exercises over the year. This included Rim of the Pacific, an exercise off Hawaii that featured participants from 22 nations (including China for the first time), and the international mine countermeasures exercise in the 5th Fleet's arena in and around the Arabian Gulf that included participants from 44 nations. In addition, the Marine Corps deployed numerous other units globally. The newly developed Marine Security Guard Security Augmentation Unit deployed 29 times during 2014 to augment posts at the request of the State Department to a variety of embassies. Marine Rotational Force-Darwin based in Darwin, Australia, conducted bi-lateral training and exercises. The Black Sea Rotational Force continued their enduring activities in the European Command area of operations and Fleet Anti-Terrorism Security Teams provided forward-deployed platoons to four GCCs in support of dynamic mission tasking such as embassy reinforcement in Baghdad, Iraq.

The Department's FY 2016 President's Budget represents the bare minimum to execute the DSG in the world we face, but still results in high risk in two of the most challenging DSG missions that depend on adequate numbers of modern, responsive forces. The principal risk to the Department's ability to meet the DSG remains the uncertainty in future funding, which affects our planning and the ability to balance near- and long-term readiness and capability. The FY 2014 President's Budget was the last budget submission to fully meet all of the missions of the DSG. The Department made difficult, strategy-based choices to reprioritize within available resources, but that is not sustainable. The FY 2013 sequestration was manageable in part because of key budget reprogramming actions made by the Department with Congressional support. In order to accomplish this, however, the Department applied mitigating actions to

ships in execution and deferred costs to future years in order to avoid breaking programs. While the Bipartisan Budget Act of 2013 (BBA) provided some relief from sequestration-level funding in FY 2014 and FY 2015, significant shortfalls remained compared to the FY 2014 President's Budget. The Department was compelled to further reduce the capability of weapons and aircraft, slow modernization, and delay upgrades to all but the most critical shore infrastructure. As a result, the Department is challenged with maintenance backlogs, compressed training for modernization, and impacts on our people and their families due to extended deployments.

If sequestration returns in FY 2016, a revisit and revision of the defense strategy would be necessary. With limited ability to mitigate the impacts as we did in FY 2013, sequestration in FY 2016 would force the Department to further delay critical warfighting capabilities, reduce readiness of forces needed for contingency response, further downsize weapons capacity, and forego or stretch force structure procurements as a last resort. The Marine Corps would assume additional significant risk in long-term modernization and infrastructure sustainment, delay of major acquisition programs, forced sustainment of aged legacy systems resulting in increased operations and support costs, as well as further detrimental impacts to readiness, which will lead to morale issues and quality of life degradation. The Department's capability and capacity to meet operational requirements over the long-term will be reduced, including our ability to deploy forces on the timeline required by GCCs in the event of a contingency.

The Fiscal Year 2016 President's Budget Request

The FY 2016 President's Budget submission continues to balance force structure, readiness, and capability to meet national security commitments. The Department's shipbuilding plan is built around stability, balancing near-term and long-term requirements to enable efficient planning and procurement, improve cost performance, and sustain the critical shipbuilding and supplier industrial base. A brief overview of seapower and projection forces programs follows.

Shipbuilding

The FY 2014 update to the 2012 Force Structure Assessment (FSA) to meet the Department of the Navy's required missions in support of the DSG, has increased the objective to 308-ships to account for evolving force structure decisions and real-world changes to assumptions made in 2012. The Department's FY 2016 shipbuilding plan continues to build toward the balanced force required by the FSA. As such, the FY 2016 President's Budget

requests funding for nine ships: two *Virginia* class attack submarines, two DDG 51 *Arleigh Burke* class destroyers, three Littoral Combat Ships (LCS), the first next generation logistics fleet resupply ship T-AO(X), and the remaining funding for the Amphibious Transport Dock (LPD 28) that Congress added in FY 2015. The FY 2016 submission for the Future Years Defense Program (FYDP), FY 2016 to FY 2020, plans for the procurement of 48 ships. Additionally, the budget request includes funding for the aircraft carrier USS *George Washington*'s refueling and complex overhaul (RCOH).

An additional key component of our budget submission is the modernization of 11 cruisers, which are the most capable ships for controlling the air defense of a carrier strike group. The Navy's cruiser modernization plan in accordance with FY 2015 Congressional direction will allow the Navy to reduce some funding requirements while increasing the capability and extending the service life of our large surface combatants.

The key elements of the FY 2016 shipbuilding plan will now be discussed for each area of the plan.

Aircraft Carriers

Our aircraft carriers are central to our nation's defense strategy, which calls for forward presence; the ability to simultaneously deter potential adversaries and assure our allies; and capacity to project power at sea and ashore. These national assets are equally capable of providing our other core capabilities of sea control, maritime security, and humanitarian assistance and disaster relief. Our carriers provide our nation the ability to rapidly and decisively respond globally to crises, with a small footprint that does not impose unnecessary political or logistical burdens upon our allies or potential partners.

Nimitz and *Ford* class carriers will be the premier forward deployed asset of choice for crisis response and early decisive striking power in major combat operations for the next half-century. The Department has established a steady state *Ford* class procurement plan designed to deliver each new ship in close alignment with the *Nimitz* class ship it replaces. The design improves warfighting capability, survivability, operational availability, and quality of life for Sailors, while reducing the ship's crew by between 500 and 900 personnel and decreasing total ownership costs by approximately \$4 billion per ship. *Gerald R. Ford* (CVN 78), the lead ship of the class, was launched in November 2013. As of January 2015, CVN 78 is 87 percent complete, 37 percent of compartments have been turned over to the crew, 9.4 million feet of the

9.8 million feet of cabling (96 percent) has been installed, and 36 percent of the shipboard testing program is complete. CVN 78 land-based catapult testing commenced in December 2014. CVN 78 is planned for delivery in FY 2016.

The Navy is committed to delivering CVN 78 within the \$12.887 billion Congressional cost cap. Sustained efforts to identify cost reductions and drive improved cost and schedule on this first-of-class aircraft carrier have resulted in highly stable performance since 2011.

Parallel efforts by the Navy and shipbuilder are driving down and stabilizing aircraft carrier construction costs for the future *John F Kennedy* (CVN 79) and estimates for the future *Enterprise* (CVN 80). As a result of the lessons learned on CVN 78, the approach to carrier construction has undergone an extensive affordability review. The Navy and the shipbuilder have made significant changes on CVN 79 to reduce the cost to build the ship as detailed in the 2013 CVN 79 report to Congress. The benefits of these changes in build strategy and resolution of first-of-class impacts on CVN 79 are evident in metrics showing significantly reduced man-hours for completed work from CVN 78. These efforts are ongoing and additional process improvements continue to be identified.

The Navy extended the CVN 79 construction preparation contract into 2015 to enable continuation of ongoing planning, construction, and material procurement while capturing lessons learned associated with lead ship construction and early test results. The continued negotiations of the detail design and construction (DD&C) contract afford an opportunity to incorporate further construction process improvements and cost reduction efforts. Award of the DD&C contract is expected in third quarter FY 2015. This will be a fixed price-type contract.

Additionally, the Navy will deliver the CVN 79 using a two-phased strategy. This enables select ship systems and compartments to be completed in a second phase, wherein the work can be completed more efficiently through competition or the use of skilled installation teams responsible for these activities. This approach, key to delivering CVN 79 at the lowest cost, also enables the Navy to procure and install shipboard electronic systems at the latest date possible.

The FY 2014 NDAA adjusted the CVN 79 and follow ships cost cap to \$11,498 million to account for economic inflation and non-recurring engineering for incorporation of lead ship lessons learned and design changes to improve affordability. In transitioning from first-of-class to first follow ships, the Navy has maintained *Ford* class requirements and the design is highly stable. Similarly, we have imposed strict interval controls to drive changes to the way we do

business in order to ensure CVN 79 is delivered below the cost cap. To this same end, the FY 2016 President's Budget request aligns funding to the most efficient build strategy for this ship and we look for Congress' full support of this request to enable CVN 79 to be procured at the lowest possible cost.

Enterprise (CVN 80) will begin long lead time material procurement in FY 2016. The FY 2016 request re-phases CVN 80 closer to the optimal profile, therefore reducing the overall ship cost. The Navy will continue to investigate and will incorporate further cost reduction initiatives, engineering efficiencies, and lessons learned from CVN 78 and CVN 79. Future cost estimates for CVN 80 will be updated for these future efficiencies as they are identified.

With more than half of the service life of the *Nimitz* class still remaining, RCOH continues as a key enabler for the enduring presence of the aircraft carrier Fleet. USS *Abraham Lincoln* (CVN 72) completed her RCOH undocking in November 2014. This year's budget request restores funding for the USS *George Washington* (CVN 73) RCOH. The CVN 73 thirty month RCOH advanced planning, long lead time material procurement, engineering, and early fabrication contract was awarded in February 2015.

Submarines

Submarines' stealth and ability to conduct sustained forward-deployed operations in anti-access / area-denial environments serve as force multipliers by providing high-quality Intelligence, Surveillance, and Reconnaissance (ISR) as well as indication and warning of potential hostile action. In addition, attack submarines are effective in anti-surface warfare (ASuW) and undersea warfare in almost every environment, thus eliminating any safe-haven that an adversary might pursue with access-denial systems. As such, they represent a significant conventional deterrent. The Navy is mitigating an impending attack submarine force structure shortfall in the 2020s through multiple parallel efforts: continuing procurement of two *Virginia* class submarines per year; reducing the construction span of *Virginia* class submarines; extending the service lives of select attack submarines (SSN 688s) with the potential to eliminate 10-15 attack submarine (SSN) years from the SSN shortfall of 51 years. While each of the Navy's attack submarines provides considerable strike capacity, guided missile submarines (SSGN) provide substantially more strike capacity and a robust capability to deploy special operations force (SOF) personnel. Lastly, the Navy's 14 ballistic missile submarines (SSBNs)

provide the nation with an around-the-clock, credible, modern and survivable sea-based strategic deterrent.

SSBNs, coupled with the TRIDENT II D-5 Strategic Weapons System, represent the most survivable leg of the Nation's strategic arsenal and provide the Nation's most assured nuclear response capability. Originally designed for a 30-year service life, the Ohio class was extended to its limit at 42 years of operation. With the Ohio class SSBNs being an average of 25.5 years old, the U.S. must continue development of the follow-on twelve ship Ohio Replacement (OR) SSBN program as the current SSBNs' life cycles cannot be extended further. This is our top priority program within the Department of the Navy.

The FY 2016 President's Budget requests full funding of two *Virginia* class submarines and advanced procurement for the FY 2017 and FY 2018 vessels. The *Virginia* class submarine program has delivered the last seven ships on budget and ahead of schedule. The last ship delivered, USS *North Dakota* (SSN 784), included a completely redesigned bow section as part of the Design for Affordability efforts, an approximate 20 percent design change. Additionally, USS *North Dakota* delivered with the highest quality of any *Virginia* class submarine to date.

The Navy awarded the Block IV contract in April 2014 for ten ships. It continues the co-production of the *Virginia* class submarines between General Dynamics Electric Boat and Huntington Ingalls Industries - Newport News Shipbuilding through FY 2018. The savings realized with this multiyear procurement (MYP) contract was over \$2 billion, effectively giving the Navy ten ships for the price of nine.

In December 2012, the Navy awarded a research and development (R&D) contract for OR SSBN which focuses on meeting the program's performance requirements while reducing costs across design, production, and operations and sustainment. The lead ship recurring estimate was reduced to \$6.2 billion Constant Year (CY) (\$8.8B Then Year (TY)) dollars from \$6.8 billion CY (\$10.0B TY) dollars. The average follow-on ship recurring cost estimate was reduced to \$5.2 billion CY (\$9.8B TY) dollars from \$5.4 billion CY (\$10.5B TY) dollars. The non-recurring cost estimate is \$17.1 billion CY (\$22.4B TY). Cost reduction efforts continue and bring the Navy closer to its cost goals. The cost reduction efforts will continue throughout the design and construction phases.

The FY 2016 President's Budget requests funding to continue development of the OR SSBN and ensures Common Missile Compartment (CMC) efforts remain on track to support the United Kingdom's SUCCESSOR Program's schedule. Given the need to recapitalize this

strategic asset, coupled with the ongoing need to support Navy force structure, the Navy continues to pursue the means to resource construction of the OR SSBN in accordance with the schedule to fulfill U.S. Strategic Command requirements. The first-of-class is to be procured in 2021, with Shipbuilding and Conversion, Navy (SCN) advanced procurement in 2019 and 2020. The Navy continues to need significant increases in our topline beyond the FYDP, not unlike that during the period of *Ohio* construction, in order to afford the OR SSBN procurement costs. Absent a significant increase to the SCN appropriation, OR SSBN construction will seriously impair construction of virtually all other ships in the battle force: attack submarines, destroyers, and amphibious warfare ships. The shipbuilding industrial base will be commensurately impacted and shipbuilding costs would spiral unfavorably. The resulting battle force would fall markedly short of the FSA, unable to meet fleet inventory requirements. The National Sea-Based Deterrence Fund is a good first step in that it acknowledges the significant challenge of resourcing the OR SSBN, but the fund is unresourced.

In addition to the Department of the Navy's budget request, the continued support of Congress for Naval Reactors' Department of Energy (DoE) funding is vital to the Navy mission and ensuring the safe, reliable and enduring operations of the nuclear-powered Fleet. The President's FY 2016 DOE budget fully funds Naval Reactors request for the OR SSBN. This funding is critical to maintain the reactor design and development in sync with the Navy shipbuilding schedule to support lead ship procurement in 2021. The DoE budget submission also provides full funding for refueling the Land-based Prototype. This effort not only supports development of the OR SSBN life-of-the-ship core, but also ensures Naval Reactors continues to train about 1,000 nuclear-qualified sailors per year for the next twenty years. Naval Reactors' DoE budget also includes the second year of funding for the Spent Fuel Handling Project (SFHP). Recapitalizing this facility is critical to the Navy's tight refueling and defueling schedule of nuclear-powered aircraft carriers and submarines.

The Navy's four SSGNs provide significant warfighting capability, but will be retired in 2026-2028 after 42 years of combined SSBN/SSGN service. To mitigate the 60 percent reduction in undersea strike capacity when they retire, the Navy is investing in *Virginia* Payload Module (VPM) that will include a hull insert amidships of a *Virginia* class submarine that will contain four 87-inch diameter missile tubes each capable of launching seven TOMAHAWK cruise missiles. The FY 2016 President's Budget continues VPM R&D and starts SCN funding

in FY 2017 for detail design efforts to enable integrating VPM into Block V *Virginia* class SSNs in one per year starting in FY 2019.

Large Surface Combatants

Guided missile cruisers (CGs) and guided missile destroyers (DDGs) comprise our large surface combatant Fleet. When viewed as a whole, these ships fulfill broad mission requirements both independently and in conjunction with a strike group. The demands for increased capability and capacity in Ballistic Missile Defense (BMD) and Integrated Air and Missile Defense (IAMD) continue to be a focal point. In order to meet the increased demand for BMD, in FY 2014, the Navy forward deployed two BMD capable DDGs, *USS Donald Cook* (DDG 75) and *USS Ross* (DDG 71) to Rota, Spain. *USS Carney* (DDG 64) and *USS Porter* (DDG 78) will arrive in FY 2015. Two additional BMD ships will homeport shift to Yokosuka, Japan in 2015 and 2016, *USS Benfold* (DDG 65) and *USS Barry* (DDG 52). The Anti-Submarine Warfare (ASW) combat systems on DDGs and CGs are also being upgraded, bringing significant improvements over legacy systems.

The *Arleigh Burke* class (DDG 51) program remains one of the Navy's most successful shipbuilding programs – 62 ships are currently operating in the Fleet. The FY 2016 President's Budget includes funding for two destroyers to execute the fourth year of the current MYP. One of these ships will incorporate IAMD and provide additional BMD capacity, and the other ship will introduce the next flight upgrade known as Flight III, which incorporates the Air and Missile Defense Radar (AMDR), with both ships bringing additional capability to the Fleet when they deliver in the early FY 2020s. AMDR and Flight III are essential for future sea-based BMD. The FY 2016 President's Budget also includes funding to complete the construction of *Thomas Hudner* (DDG 116) to restore program funding removed by the FY 2013 sequestration.

AMDR is the future multi-mission radar of the Navy's surface combatant fleet, which will meet the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection for engagement of increasingly complex threats. In October 2013, the Navy awarded the contract for development of the AMDR, with options for up to nine low rate initial production (LRIP) units. The AMDR radar suite will be capable of providing simultaneous surveillance and engagement support for long range BMD and area defense. The program continues to demonstrate maturity in the design development as shown in successful completion of the AMDR hardware critical design review (CDR) in December 2014 and is on track for the

system CDR in April 2015. Engineering Change Proposal (ECP) detail design efforts for the DDG Flight III design will continue in FY 2016, ultimately leading to over 90 percent detail design completion prior to construction on the first Flight III ship.

The DDG 1000 *Zumwalt* class guided missile destroyer will be an optimally crewed, multi-mission, surface combatant designed to provide long-range, precision, naval surface fire support to Marines conducting littoral maneuver and subsequent operations ashore. In addition to the ship's two 155mm Advanced Gun Systems capable of engaging targets with the Long Range Land Attack Projectiles (LRLAP), the ship will be capable of conducting ASW, land attack, and will provide valuable advancements in technology such as signature reduction (both acoustic and radar cross-section), active and passive self-defense systems, enhanced survivability features, and shipboard automation (in support of reduced manning). The DDG 1000 program accomplished several construction milestones in 2014 with significant test and activation efforts continuing for the ship's propulsion and power plants. DDG 1000 sea trials will be conducted this year in preparation to enter the Fleet in 2016. The FY 2016 budget requests funds to continue the DDG 1000 program.

Small Surface Combatants

The Littoral Combat Ship (LCS) enables the Navy to implement the DSG imperative to develop innovative, low-cost, and small-footprint approaches to achieve our security objectives. The modular, open systems architecture inherent in LCS allows for rapid integration of technological solutions that increase capability at reduced cost. The LCS complements our inherent blue water capability and fills war fighting gaps in the littorals and strategic choke points around the world. LCS design characteristics (speed, agility, shallow draft, payload capacity, reconfigurable mission spaces, air/water craft capabilities) combined with its core command, control, communications, computers and intelligence; sensors; and weapons systems, allow LCS to bring unique strengths and capabilities to the mission.

In February 2014, Secretary Hagel capped LCS at 32 ships, pending an evaluation of the alternatives to increase the lethality and survivability of future small surface combatants. In December 2014, Secretary Hagel approved the Navy's proposal to procure a small surface combatant based on an upgraded LCS. The upgraded LCS will provide multi-mission ASuW and ASW, as well as continuous and effective air, surface and underwater self-defense. As these capabilities are generally consistent with those of a frigate, the Secretary of the Navy directed re-

designation of upgraded LCS to frigates (FF). The FY 2016 President's Budget requests funding for concept development and design for improved survivability and lethality performance in the Navy's future Frigate. The FY 2016 request also includes funding for three LCS Class ships. The Navy plans to extend the FY 2010 - 2015 block buy contract to include the first ship in FY 2016, and use the competitive pricing from the block buy to obtain option prices for the remaining two FY 2016 ships. Furthermore, the FY 2016 request includes funding to complete construction on LCS 9 through LCS 12, which was deferred due to sequestration in FY 2013.

The LCS Mission Modules (MM) program continues its efforts to field capability incrementally as individual mission systems become available, rather than wait for all the mission systems needed for the end-state capability. The direction from Secretary Hagel does not affect the near term content and funding needs of the LCS MM program. The Navy still must continue to procure Mission Packages (MP) for fielding aboard LCS 1-32. In addition, the future frigates will retain specific mission module capabilities to augment the ships' organic ASuW and ASW, as directed by the Fleet Commanders. In November 2014, the program declared Initial Operational Capability (IOC) for the Surface Warfare (SUW) MP after successful testing onboard *USS Fort Worth* (LCS 3) in April 2014. The Mine Countermeasure (MCM) MP completed its final Increment 1 Developmental Test event in October 2014. The MCM MP is currently scheduled for Technical Evaluation and Initial Operational Test & Evaluation (IOT&E) in 2015. The ASW MP successfully completed its initial integration test onboard *USS Freedom* (LCS 1) in September 2014, with operational testing scheduled to begin in 2016. This early operational test event will reduce integration risk through real-world, at-sea testing of the Advanced Development Model (ADM). A subsequent early deployment of the ASW MP ADM aboard *USS Freedom* (LCS 1) in 2016 will further prove out the capabilities of the ASW MP. Operational testing will culminate in IOT&E in 2017. Significant developmental and operational testing has already been accomplished on both variants, with embarked ASW, MCM and SUW MPs. The LCS and ASW MP performed as predicted and marked the first time an LCS has tracked a submarine with variable depth sonar and a multi-function towed array. *USS Freedom* (LCS 1) also served as the test platform for the Surface Electronic Warfare Improvement Program Block Two-Lite engineering development model (EDM) installation and testing. The FY 2016 President's Budget requests funding for five MPs (two MCM, two SUW, and one EDM for ASW.) The LCS, with a MP, provides capability that is equal to or exceeds the current capability of the ships that it is replacing.

With four LCS in-service, operational experience continues through at sea testing, operations and rotational deployments. *USS Fort Worth*'s deployment marks the beginning of continuous LCS forward presence in Southeast Asia, and will validate the Class 3:2:1 (three crews, two ships, one ship always forward-deployed) rotational manning and crewing concept and mark the first deployment of the Navy's MH-60R Seahawk helicopter along with the MQ-8B Fire Scout on an LCS.

Amphibious Ships

Amphibious ships operate forward to support allies, respond to crises, deter potential adversaries, and provide the nation's best means of projecting sustainable power ashore; they also provide an excellent means for providing humanitarian assistance and disaster relief. Amphibious forces comprised of Sailors, Marines, ships, aircraft and surface connectors provide the ability to rapidly and decisively respond to global crises without a permanent footprint ashore that would place unnecessary political or logistical burdens upon our allies or potential partners. There are two main drivers of the amphibious ship requirement: maintaining persistent forward presence, which enables both engagement and crisis response, and delivering the assault echelons of up to two Marine Expeditionary Brigades (MEB) for joint forcible entry operations.

The Chief of Naval Operations and Commandant of the Marine Corps have determined that the force structure for amphibious lift requirements is 38 amphibious ships, fiscally constrained to 33 ships. Balancing the total naval force structure requirements against fiscal projections imposes risk on meeting this requirement. Based on the footprint of a 2.0 MEB assault echelon force, a minimum of 30 operationally available ships are necessary to provide a force made up of ten Amphibious Assault Ships (LHD/LHA), ten Amphibious Transport Docks (LPD) and ten Dock Landing Ships (LSD). The FY 2016 shipbuilding plan will result in a projected amphibious ship force structure of at least 31 ships in the near-term and maintains at least 33 ships throughout the 2020s and 2030s. At the end of FY 2016, the Amphibious Force Structure will be 31 ships, which includes 9 LHD/LHAs, 10 LPDs, and 12 LSDs.

LHA(R) Class ships are flexible, multi-mission platforms with capabilities that span the range of military operations -- from forward deployed crisis response to forcible entry operations. These ships will provide the modern replacements for the remaining LHA 1 *Tarawa* class ship and the aging LHD 1 *Wasp* class ships as they begin decommissioning in the late 2020s. *USS America* (LHA 6) and *Tripoli* (LHA 7) are optimized for aviation capability and do

not include a well deck. USS *America* delivered to the Navy in April 2014 and was commissioned in October 2014. LHA 7 is currently under construction and will deliver in 2018. LHA 8, the first Flight 1 ship, will have a well deck to increase operational flexibility and a smaller island that increases flight deck space to retain aviation capability. LHA 8 is funded in FY 2017 and FY 2018, and is planned for delivery in FY 2024. LHA 8 will be competed as part of an amphibious and auxiliary shipbuilding acquisition strategy to support stability and affordability for this sector of the industrial base. The Navy expanded the early industry involvement efforts for the LHA 8 design and initiated a phased approach to the design for affordability of amphibious ships. FY 2014 funding enabled affordability efforts that foster an interactive competition with industry partners in developing a more affordable, producible detail design and build strategy, and drive towards more affordable ships.

The *San Antonio* class (LPD 17) provides the ability to embark, transport control, insert, sustain, and extract elements of a MAGTF and supporting forces by helicopters, tilt rotor aircraft, landing craft, and amphibious vehicles. Two ships are under construction, John P. Murtha (LPD 26) and Portland (LPD 27), and will deliver in spring 2016 and summer 2017, respectively. The FY 2015 Consolidated and Further Continuing Appropriations Act provided \$1 billion of funding toward a twelfth ship of class, LPD 28. The FY 2016 President's Budget requests the balance of funding for LPD 28, and cost to complete funding for LPD 27. The program will include targeted cost reduction initiatives to improve affordability of the ship. Procurement of LPD 28 will assist in mitigating some impacts to shipbuilding and combat systems industrial bases. LPD 28 will possess all of the key fundamental capabilities and characteristics associated with LPDs 17 through 27, to include command and control, aviation operations and maintenance, well deck operations, and medical. There are fact of life changes due to obsolescence which need to be incorporated. LPD 28's design and construction features will, at the same time, exploit many of the ongoing LX(R) design innovations and cost reduction initiatives that are necessary for the program to achieve affordability goals while maintaining the high level capabilities of the LPD 17 class.

LX(R) is the replacement program for the landing ship dock, LSD 41 and LSD 49 classes, which will begin reaching their estimated service life in the mid-2020s. The Analysis of Alternatives Report was completed in April 2014. After thorough analysis, the Department has determined that using a derivative of the LPD 17 hull form is the preferred alternative to meet LX(R) operational requirements. This determination sustains the program's focus on

requirements, affordability and total ownership cost. Program focus during FY 2016 will be to finalize the requirements in the Capability Development Document and execute contract design efforts to meet acquisition milestones for procurement of the lead ship in FY 2020. The LX(R) contract design effort is part of the Navy's recent announcement of its acquisition strategy for the LHA 8, six T-AO(X) ships, and LX(R) contract design. Both General Dynamics NASSCO and Huntington Ingalls Industries, Ingalls Shipbuilding will participate in this limited competition.

LX(R) is envisioned to be a flexible, multi-mission warship with capabilities that support execution of the full range of military operations. The need to support disaggregated or split operations away from the Amphibious Readiness Group or to deploy independently is a key driver for the design of the ship class. The inherent flexibility of amphibious ships is demonstrated by their support to 7 of the 10 missions in the DSG. LX(R) will be a versatile, cost-effective amphibious ship -- a success story in leveraging mature design while balancing cost and requirements to deliver key capabilities. The lead LX(R) will deliver in time for LSD 43's retirement in FY 2027.

The Navy plans to maintain 11 deployable LSDs in the active force until LX(R) delivers by rotating three LSDs to complete phased modernizations beginning in FY 2016. This will extend USS *Whidbey Island* (LSD 41), USS *Germantown* (LSD 42), and USS *Tortuga* (LSD 46) to a 44 year expected service life. This plan mitigates presence shortfalls and supports 2.0 MEB Assault Echelon shipping requirements.

Auxiliary Ships

Support vessels such as the Mobile Landing Platform (MLP) and the Joint High Speed Vessel (JHSV) provide additional flexibility to the Combatant Commanders. The future USNS *Lewis B. Puller* (MLP 3), the first Afloat Forward Staging Base (AFSB) variant, was christened in February 2015, and will deliver in summer 2015. USNS *Montford Point* (MLP 1) completed its integrated testing and evaluation phase this past fall and the Navy continues to explore further use beyond Maritime Prepositioning Force to facilitate expeditionary operations. The Navy awarded MLP 4 AFSB in December 2014, and plans to request MLP 5 AFSB in FY 2017.

The JHSV provides a high-speed, shallow-draft alternative to moving personnel and materiel within and between the operating areas, and to supporting security cooperation and engagement missions. JHSV production continues with delivery of the fifth JHSV anticipated in April 2015. JHSVs 6-10 are also under contract. In FY 2015, Congress provided funding for an

eleventh JHSV. The Navy is exploring opportunities to further enhance JHSV's operational profile to support/enhance warfighter requirements such as Special Operations support, Maritime Interdiction Operations, submarine rescue, and ISR missions. Additional research is being applied to the stern ramp to increase its ability to conduct at sea delivery. The FY 2016 President's Budget requests cost to complete funding for the JHSV program in order to restore funding reduced by FY 2013 sequestration.

Combat Logistics Force ships fulfill the vital role of providing underway replenishment of fuel, food, repair parts, ammunition and equipment to forward deployed ships and embarked aircraft, to enable them to operate for extended periods of time at sea. Combat Logistic Force Ships consist of T-AOE fast support ships, T-AKE auxiliary dry cargo ships, and T-AO fleet replenishment oilers. The T-AO and T-AKE ships serve as shuttle ships between resupply ports and their customer ships, while the T-AOE ships serve as station ships, accompanying and staying on-station with a Carrier Strike Group to provide fuel as required to customer ships.

Navy continued its efforts to mature its concept for the replacement of the *Kaiser* class (T-AO 187) of Fleet Replenishment Oilers. The new replacement oilers, currently designated as T-AO(X), will be double-hulled and meet Oil Pollution Act 1990 and International Marine Pollution Regulations. The FY 2016 President's Budget request includes the lead ship in 2016 with serial production beginning in 2018. The total ship quantity is expected to be 17 ships. The Department recently announced an acquisition strategy for LHA 8, T-AO(X), and LX(R), and will limit this competition to NASSCO and HII Ingalls.

Beginning in 2017, the Navy plans to begin procuring replacement ships for the four T-ATF 166 class fleet tugs, which reach the end of their expected service lives starting in 2020. T-ARS(X) is a recapitalization project to replace the capabilities provided by the four T-ARS 50 class salvage ships, which reach the end of their expected service lives starting in 2025. As noted in the Long Range Shipbuilding Plan, the Navy is considering a common hull to replace both the T-ATF and T-ARS; acquisition of a common hull would follow the acquisition approach described for the T-ATF(X) and would preclude the need to acquire a separate T-ARS(X) class.

Affordability and the Shipbuilding Industrial Base

Stability and predictability are critical to the health and sustainment of the Nation's shipbuilding industrial capacity. A healthy design and production industrial base is critical to

achieving Department priorities and fulfilling Navy needs. Today's shipbuilding industry, with its interdependent suppliers and vendors, is a complex system where decisions made today have a cascading effect both in the near-term as well as years into the future. Perturbations in naval ship design and construction plans are significant because of the long-lead time, specialized skills, and extent of integration needed to build military ships. Each ship is a significant fraction of not only the Navy's shipbuilding budget, but also industry's workload and regional employment. Consequently, the timing of ship procurements is a critical matter to the health and sustainment of U.S. shipbuilding and combat system industries, and has economic impacts at the regional and local levels. It is important, therefore, for the Department to provide stability and predictability to the industrial base, including key suppliers and vendors, to maintain our ability to continue to build the future Fleet as outlined in the Long Range Shipbuilding Plan.

The Navy has taken specific key acquisition and procurement actions to contain costs and sustain the industrial base, including:

- Stabilizing procurements through block buys and MYPs;
- Increasing competition;
- Controlling costs through stable designs;
- Strictly limiting change orders;
- Conducting targeted reviews;
- Pursuing cross-program common equipment buys; and
- Focusing on affordability.

In addition, the Navy has made investments to support shipyard facility improvements, optimal build plans, conduct of affordability studies, lease for facilities improvement, design for affordability and modularity, combat system open architecture, and shipbuilding capability preservation agreements. These investments support affordability, minimize life-cycle costs, improve and ensure quality products, facilitate effective and efficient processes, and promote competition -- which all support Department priorities.

Surface Ship Modernization

The FY 2016 President's Budget implements the CG/LSD modernization plan as modified by the FY 2015 NDAA and Consolidated and Further Continuing Appropriations Act. This plan will provide the means to retain the best Air Defense Commander and Marine expeditionary lift capabilities through the 2030s. This plan paces the threat through the

installation of the latest technological advances in combat systems and engineering in CGs 63-73 and LSDs 41, 42 and 46. As a result, these ships remain relevant and viable, extending the CGs service life out to 40 years, enabling the Navy to sustain dominant force structure. To date, the Navy has modernized CGs 52-58 with the Advanced Capability Build (ACB) 08 Combat System as well as substantial Hull, Mechanical, and Electrical (HM&E) upgrades, and has nearly completed modernization on CGs 59, 60, and 62 with the improved ACB 12. These investments have allowed the first 11 ships of the *Ticonderoga* class to remain the world's premier Air Defense Commander platform, fully capable of integrating into the CSG construct or operating independently in support of Combatant Commander demands.

The Navy has developed an affordable framework to retain the remaining eleven cruisers (CGs 63-73) in the active Fleet, through induction into a phased modernization period. Within the guidelines of the FY 2015 Consolidated and Further Continuing Appropriations Act, the Navy will induct no more than two ships per year for no more than four years, and have no more than six ships in a modernization period at any given time. In FY 2015, the Navy is inducting the first two ships, the USS *Gettysburg* (CG 64) and USS *Cowpens* (CG 63) into modernization. The FY 2016 President's Budget request inducts the next two CGs, USS *Vicksburg* (CG 69) and USS *Chosin* (CG 65), into modernization in FY 2016.

The Navy will begin the modernization of these ships with material assessments, detailed availability planning, and material procurements. Subsequently, the Navy will perform HM&E upgrades, critical structural repairs, and extensive corrective and condition-based maintenance. These HM&E modernization and repair efforts will commence as soon as possible after entering this modernization period, and will include modernization industrial periods. The HM&E-centric maintenance and modernization industrial periods will include modifications that are part of the Cruiser Modernization program of record, such as structural modifications and maintenance, including tanks and voids, and mission life extension alterations. Other preparatory work for the combat system modernization, such as equipment removal and space preparations may also be accomplished during these periods. These modernization industrial periods can be scheduled at times when there is a shortage of work in the various homeports, thereby leveling the work load and effectively utilizing industrial facilities. Without the pressure of meeting near term Fleet deployment schedules, the work can be planned in the most economical and efficient manner, including reducing the need for costly overtime rates and hiring subcontractors to supplement shipyard workforce. The final phase will include combat

system installation, integration, and testing. This will occur concurrently with re-crewing the ship, immediately preceding re-introduction to the Fleet. With combat systems modernization occurring immediately prior to restoration, these ships will have the latest combat systems upgrades, thus mitigating the risk and cost of technical obsolescence. The Navy intends to draw down the manpower for these CGs during their modernization, to reduce the cruiser costs during the period. The plan is to complete modernization of each cruiser on a schedule that sustains 11 deployable Air Defense Commander CGs (one per Carrier Strike Group) into the 2030s. Under the Navy's original phased modernization plan proposed in the FY 2015 President's Budget, the final CG retirement would have occurred in 2045, at a significantly reduced cost to the Navy, and would have relieved pressure on the shipbuilding account largely consumed in the 2030s with building OR SSBNs and aircraft carriers.

Similarly, the Navy plans to perform the final *Whidbey Island* class midlife modernization as well as to extend two LSDs through this plan. This plan completes the HM&E midlife and modernizes combat systems/command, control, communications, computers, collaboration, and intelligence on *USS Tortuga* (LSD 46) (thereby achieving 40 year expected service life), while providing for additional post-midlife modernization for *USS Whidbey Island* (LSD 41) and *USS Germantown* (LSD 42). LSD 41 and 42 will receive additional structural, engineering, and combat systems modernizations to extend their expected service life to 45 years. LSD 46 will be inducted into modernization in FY 2016.

The FY 2016 President's Budget also includes funding for the modernization of four destroyers. To counter emerging threats, this investment is critical to sustain combat effectiveness and to achieve the full expected service lives of the Aegis Fleet. The destroyer modernization program includes HM&E upgrades as well as advances in warfighting capability and open architecture combat systems. This renovation reduces total ownership costs and expands mission capability for current and future combat capabilities. However, due to fiscal constraints, we were compelled to reduce the combat system modernization of one DDG Flight IIA per year starting in FY 2018.

Naval Aviation

There are several central themes to our FY 2016 Naval Aviation Budget plan: Persistent multi-role ISR; supporting capabilities such as maritime patrol; and targeted modernization of the force for relevance and sustainability. To meet the demand for persistent, multi-role ISR

capability, the Navy and Marine Corps are building a balanced portfolio of manned and unmanned aircraft, leveraging other service capacity where able, but valuing the unique contribution of maritime ISR. The Department is also recapitalizing our aging fleets of airborne early warning and maritime patrol aircraft. Specifically, the Department is replacing our fleet of E-2C airborne early warning aircraft with the E-2D and our P-3C maritime patrol aircraft with the modern P-8A.

Airborne Early Warning Aircraft

The E-2D Advanced Hawkeye (AHE) is the Navy's carrier-based Airborne Early Warning and Battle Management C2 system, which provides premier airborne battle management command and control and surveillance as part of the Naval and Joint IAMD architecture, which includes Naval Integrated Fire Control - Counter Air (NIFC-CA) capability. In addition, E-2D AHE is capable of synthesizing information from multiple onboard and off-board sensors, making complex tactical decisions and then disseminating actionable information to Joint Forces in a distributed, open-architecture environment. Utilizing the AN/APY-9 Mechanical/Electronic Scan Array radar, Link-16, and the Cooperative Engagement Capability system, the E-2D AHE works in concert with tactical aircraft and surface-combatants equipped with the Aegis combat system to detect, track and defeat air and cruise missile threats at extended ranges and provide Strike Group Commanders the necessary required reaction time.

The first Fleet E-2D squadron (VAW-125) has transitioned and was designated "safe for flight" in January 2014. IOC was subsequently met in October 2014. Initial fleet introduction of the NIFC-CA Increment I capability that integrates aircraft sensor and ship weapon capabilities and improves lethality against advanced air and missile threats will commence in 2015.

The Department is requesting \$272.2 million RDT&E,N to continue development of improved E-2D capabilities during FY 2016. These capability improvements include in-flight refueling, Secret Internet Protocol Router chat, Advanced Mid-Term Interoperability Improvement Program, Multifunctional Information Distribution System/Joint Tactical Radio System Tactical Targeting Networking Technology, counter electronic attack, sensor netting, data fusion, Link-16 Fighter to Fighter, navigation warfare, J11 messages, and Stores Performance Assessment Requested Quality. Additionally, the Department requests \$1,053.0 million to continue Full Rate Production (FRP) of Lot 4 aircraft (the third year of a 26 aircraft

MYP contract covering FY 2014 to FY 2018), and Advance Procurement funds for FY 2017 FRP Lot 5 aircraft, and economic ordering quantity funding for the MYP (FY 2018).

Maritime Patrol Aircraft

The P-8A Poseidon recapitalizes the Maritime Patrol ASW, ASuW and armed ISR capability currently resident in the P-3C Orion. The P-8A combines the proven reliability of the commercial 737 airframe with avionics that enables integration of modern sensors and robust communications. The P-8A's first operational deployment was completed in June 2014, and continuous 7th Fleet operational deployments are underway. As of February 2015, four Fleet squadrons have completed transition to P-8A. All Fleet squadrons are scheduled to complete transition by the end of FY 2019. While P-8A inventory continues to build, Fleet squadrons must complete transition below their primary aircraft authorized (PAA). The aircraft that deliver after transition ends in FY 2019 first will be assigned to Fleet squadrons so they achieve their PAA of seven aircraft. The remaining aircraft will go to the Fleet Replenishment Squadron (FRS) and to developmental test squadrons (VX). The P-8A program is meeting all cost, schedule and performance parameters in accordance with the approved Acquisition Program Baseline.

The Department has delivered 21 aircraft (LRIP I/II/III) to the Fleet as of February 2015, and three remaining LRIP III aircraft are scheduled to deliver by May 2015. LRIP IV (13 aircraft), and FRP 1 (16 aircraft) are under contract and will start delivering in May 2015. FRP 2 (nine aircraft) is planned to award in June 2015. The FY 2016 President's budget requests \$3,278.5 million to procure 16 additional aircraft with planned procurement of 47 P-8As over the FYDP to sustain the P-3C to P-8A transition. In the FY 2016 budget, the warfighting requirement remains 117 aircraft; however the fiscally constrained inventory objective for 109 aircraft will provide adequate capacity at acceptable levels of risk.

The Department requests \$102.8 million RDT&E,N to support planned capability improvements. As fleet deliveries of the Increment 1 configuration accelerate, integration and testing of P-8A Increment 2 capability upgrades continue. P-8A Increment 2 ECP 1 "Early Multi-Static Active Coherent (MAC)" follow-on test and evaluation commenced November 15, 2014. The U.S. Navy is on track to field the ECP 1 "Early MAC" capability in FY 2015 followed by Increment 2 ECP 2 "Full MAC" capabilities in FY 2016. The Increment 2 ECP 3 contract for High Altitude ASW Weapons Capability was awarded in December 2014.

The aging P-3C fleet will continue to provide critical ASW, ASuW and ISR support for joint and naval operations worldwide until the Fleet completes transition to P-8A. The FY 2016 budget requests \$3.1 million in funding required to manage P-3C aircraft mission systems obsolescence during the transition. As of December 2014, 61 P-3C Special Structural Inspection-Kits have been installed (zero remaining); 87 Zone 5 modifications completed (last three aircraft in work); and 20 outer wing installations completed (last nine aircraft in work).

The P-3C aircraft is well beyond the original planned fatigue life of 7,500 hours for critical components, with an average airframe usage of over 18,400 hours. The budget request continues to fund the P-3 Fatigue Life Management Program so that the Navy can maintain sufficient capacity to successfully complete the transition to P-8A.

The EP-3E Aries is the Navy's premier manned Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR&T) platform. The Joint Airborne Signals intelligence (SIGINT) Common Configuration includes Multi-Intelligence sensors, robust communication, and data links employed by the flexible and dependable P-3C air vehicle to ensure effective MISR&T support across the full Range of Military Operations. The FY 2011 NDAA (Public Law 111-383) directed Navy to sustain EP-3E airframe and mission systems relevance to minimize SIGINT capability gaps until the systems are fully recapitalized with a platform or family of platforms that in the aggregate provide equal or better capability and capacity.

The Navy's ISR family of systems approach continues to shift focus from platforms to payloads: the future force will rapidly respond to changing threats with modular, scalable, netted sensors and payloads on a range of sea and shore-based manned and unmanned systems, establishing persistent maritime ISR when and where it is needed.

The Navy will use manpower from EP-3E and Special Projects Aircraft squadrons to field new ISR&T platforms such as MQ-4C Triton. The Navy's MISR&T transition plan will deliver increased capacity and persistence by the end of the decade; however, due to fiscal and end strength constraints, the Department will accept some risk in near term capability and capacity. The FY 2016 budget request maintains the legacy EP-3E force retirement date which was extended in FY 2015 by one year to FY 2020.

The FY 2016 budget request reduces risk in both capacity and capability compared to 2015 and the Navy continues to work with the Joint Staff, Office of the Secretary of Defense, and the Fleet to optimize this transition plan. The Navy has succeeded in sustaining the fielding timeline for the future force despite constraints imposed by the current fiscal environment.

These fiscal challenges are reducing procurement rates for the baseline MQ-4C and P-8, as well as the improved sensors for these platforms. Timely and predictable system delivery is crucial to the Navy's plan for meeting the intent of the FY11 NDAA. Due to the ISR&T plan's dependence on timely fielding, continued Congressional support for the MQ-4C and P-8 programs is vital to transition success.

Fixed Wing Aircraft

The Department of the Navy plans to procure two KC-130Js included in the third year of the multi-service MYP and to continue product improvements. Targeted improvements include aircraft survivability through advanced electronic countermeasure modernization, and obsolescence upgrades to the Harvest HAWK ISR/Weapon Mission Kit.

Fielded throughout our active force, the Marine Corps declared IOC for the KC-130J in 2005, bringing increased capability, performance and survivability with lower operating and sustainment costs to the MAGTF. Forward deployed in support of ongoing operations since 2005, the KC-130J continues to deliver Marines, fuel and cargo whenever and wherever needed. In 2015 the KC-130J remains in high demand, providing tactical air-to-air refueling, assault support, Close Air Support (CAS) and Multi-sensor Imagery Reconnaissance (MIR) capabilities in support of Special Purpose MAGTFs and deployed MEUs.

First deployed in 2010, the bolt-on/bolt-off Harvest HAWK mission kit for the KC-130J continues to provide extended MIR and CAS capabilities. All six mission kits have been fielded and funding included in the FY 2016 budget request will be used to maintain operational relevance of this mission system through compatibility with additional Hellfire variants and an improved full motion video data-link.

The Marine Corps has received funds for 53 of the 79 KC-130J aircraft in the program of record. The three aircraft included in the FY 2013 budget would complete the Active Component (AC) requirement of 51 aircraft. However, the Marine Corps began using the AC backup aircraft to accelerate the Reserve Component (RC) transition from the legacy KC-130T aircraft to the more capable and efficient KC-130J in FY 2014. The two aircraft requested in the FY 2016 President's Budget (\$216.7 million APN) will continue to increase KC-130J inventory as the Department strives to achieve Full Operational Capability in the RC. Delays in procurement would force the Marine Corps to sustain the KC-130T aircraft longer than planned at increased cost.

Unmanned Aircraft Systems (UAS)

The FY 2016 President's Budget funds entry into production of the MQ-4C Triton (formerly known as Broad Area Maritime Surveillance (BAMS)) with three LRIP aircraft in FY 2016. The FY 2016 President's Budget requests \$227.2 million in RDT&E,N to continue Triton development activities, \$150.9 million for Triton modernization, and \$548.8 million of Aircraft Procurement, Navy (APN-4) for procurement of the first lot of LRIP aircraft and long lead materials for the second lot of LRIP aircraft.

Triton will start establishing five globally-distributed, persistent maritime ISR orbits beginning in FY 2018, as part of the Navy's Maritime ISR&T transition plan. MQ-4C Triton test vehicles have completed 21 total flights as of February 3, 2015, and are on schedule to begin sensor integration testing in the Spring of 2015. This rigorous integrated flight test program will support a Milestone C planned for FY 2016. The MQ-4C Triton is a key component of the Navy Maritime Patrol Reconnaissance Force. Its persistent sensor dwell, combined with networked sensors, will enable it to effectively meet ISR requirements in support of the Navy Maritime Strategy.

The Navy currently maintains an inventory of four U.S. Air Force Global Hawk Block 10 UAS, as part of the BAMS Demonstrators (BAMS-D) program. These aircraft have been deployed to CENTCOM's area of responsibility for over six years. BAMS-D recently achieved over 14,000 flight hours in support of CENTCOM ISR tasking. These assets are adequate to cover all Navy needs through FY 2018.

The MQ-8 Fire Scout is an autonomous vertical takeoff and landing tactical UAV (VTUAV) designed to operate from any suitably-equipped air-capable ship, carry modular mission payloads, and operate using the Tactical Control System (TCS) and Line-Of-Sight Tactical Common Data Link. The FY 2016 budget requests \$52.8 million RDT&E,N to continue development of the MQ-8C endurance baseline, to include integration of ISR payloads, radar and short range air to surface weapons. Funding will also be used to continue payload and Frigate integration with the MQ-8B and MQ-8C. The FY 2016 President's Budget requests \$142.5 million APN for procurement of MQ-8C air vehicles, MQ-8 System ground control stations, ancillary, training and support equipment, technical support and logistics to outfit the suitably-equipped, air-capable ships and train the associated Aviation Detachments. Commonality of avionics, software, and payloads between the MQ-8B and MQ-8C has been

maximized. The MQ-8B and MQ-8C utilize the same ship-based ground control station and other ship ancillary equipment.

Fire Scout was deployed to Afghanistan from May 2011 until August 2013, and amassed more than 5,100 dedicated ISR flight hours in support of U.S. and coalition forces. Since 2012, the MQ-8B Fire Scout has flown more than 6,800 hours from Navy frigates, performing hundreds of autonomous ship board take-offs and landings in support of SOF and Navy operations. Fire Scout deployed on LCS for the first time in November 2014 aboard USS *Fort Worth* (LCS 3). The MQ-8C Fire Scout continues developmental test and has completed phase II dynamic interface testing aboard USS *Jason Dunham* (DDG 109). The MQ-8C has flown more than 350 flight hours since October 2013. The Fire Scout program will continue to support integration and testing for LCS-based mission modules.

The TCS provides a standards compliant, open architecture, with scalable C2 capabilities for the MQ-8 Fire Scout air vehicle. In FY 2016, TCS will continue to transition the Linux operating system to a technology refreshed mission control system and enhance the MQ-8 System's Automatic Identification System and sensor track generation integration with ship systems. The Linux operating system conversion overcomes hardware obsolescence issues with the Solaris based control stations and provides lower cost software updates using DoD common application software. In addition, the TCS Linux upgrade will enhance collaboration with the Navy's future unmanned aircraft system common control station.

The Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS) system will provide the CSG with a persistent, unmanned, Intelligence, Surveillance, Reconnaissance, and Targeting (ISR&T) and precision strike capability that is available organically to the CSG and comprehensively to the Joint Force. The UCLASS system will enhance the CSGs capability and versatility and enable sustained 24/7 operations from a single aircraft carrier. The FY 2016 President's Budget requests \$134.7 million in RDT&E,N for UCLASS system development efforts. This funding will continue progress on the Control System & Connectivity and Carrier Segments and the government Lead System Integrator efforts pending a limited competition for the Air Segment among the contractors that previously completed the Preliminary Design Review. The requirements for the Air Segment will reflect the results of the DoD-wide Strategic Portfolio Review (SPR) of ISR&T systems and the future composition of the carrier air wing. This will delay the award of the UCLASS Air Vehicle segment by at least one year. The UCLASS system will be integrated with carrier air wing operations, increasing the effectiveness

of current CSG ISR&T capabilities (airborne, surface, and sub-surface) by the FY 2022 timeframe. Once deployed, the UCLASS System will inherently provide reach-back to Navy and National architectures for command and control (C2) and for tasking, processing, exploitation, and dissemination. The UCLASS system will achieve these capabilities through the development and integration of a carrier-suitable, semi-autonomous, unmanned Air System; a Control System and Connectivity Segment; and the *Nimitz* class carrier. The development and integration effort is overseen by the Government as the Lead Systems Integrator, providing system-of-systems integration for the UCLASS Program.

The UCLASS Program builds on the knowledge gained through the UCAS Demonstrator (UCAS-D) efforts. The UCAS-D program advanced maritime technologies and provided risk mitigation for the UCLASS system. The UCAS-D program is in its final year of funding (\$36.0M in FY 2015) with Autonomous Aerial Refueling test flights scheduled this spring.

Weapons

Ship Defense is based on the concept of layered defense with each layer reducing the raid size until the threats are eliminated. The Navy has made significant strides in extending the fleet's defensive battle-space as well as improving the capabilities of the individual ship defense layers. Standard Missile – 6 (SM-6) provides theater and area defense for the fleet and with integrated fire control has more than doubled defensive battle-space. SM-6 continues to successfully demonstrate the integrated fire control capability with two more successful tests completed in 2015. The highly maneuverable Evolved SeaSparrow Missile (ESSM) Block 2 leverages the SM-6 active guidance section architecture to improve ship self-defense performance against stressing threats. Rolling Airframe Missile (RAM) Block 2 will achieve IOC in 2015, providing improved terminal ship defense from the higher maneuverability and improved threat detection. Through the combination of expanding the battle-space and improving the capabilities of each layer, the Navy is successfully pacing the anti-ship cruise missile threat. Affordability continues to be a focus for weapons. International cooperation on ESSM and RAM results in our allies funding 50% or more of the program costs. By leveraging investment in previous designs, the Navy's development, production, and maintenance costs are reduced. The increased capabilities inherent in these new designs can also support the use of these weapons in additional roles thereby creating multi-mission weapons from existing designs. The FY 2016 President's Budget provides the funds required for these critical activities.

The Tomahawk Weapons System is the Navy's premier precision strike standoff weapon for deep strike against various fixed and re-locatable targets and can be launched from both Surface Ships and Submarines. The current variant is the Tactical Tomahawk (TACTOM BLK IV), which preserves Tomahawk's long-range precision-strike capability while significantly increasing responsiveness and flexibility. TACTOM's improvements include in-flight retargeting, the ability to loiter over the battlefield, in-flight missile health and status monitoring, and battle damage indication imagery (providing a digital look-down "snapshot" of the battlefield via a satellite data link). Other Tomahawk improvements include rapid mission planning and execution via Global Positioning System (GPS) onboard the launch platform and improved anti-jam GPS.

The FY 2016 President's Budget requests \$184.8 million in WPN for procurement of an additional 100 BLK IV TACTOM vertical launch system weapons and associated support, \$71.2 million in OPN for the Tomahawk support equipment, and \$25.2 million in RDT&E to minimize factory shutdown time until the start of BLK IV recertification and modernization in FY 2019. The BLK IV recertification and upgrade program includes advanced communications, electronics, and software navigation upgrades that will ensure Tomahawk BLK IV remains operationally viable until the end of its service life in the 2040s. The Navy is determining whether there are warfighter capability gaps in light of advances and proliferation of adversary anti-access/area denial technology that may be addressed via additional Tomahawk upgrades.

For ASuW, President's Budget FY 2016 continues to accelerate the acquisition of the Long Range Anti-Ship Missile (LRASM) air-launched variant, which will achieve early operational capability on F/A-18E/F aircraft in FY 2019 as an Increment I capability. As part of the long-term strike weapon strategy, the Department is investing in a Next Generation Strike Capability (NGSC) that includes a survivable, long range, multi-mission, multi-platform conventional strike capability by the mid-2020s. NGSC will combine the current maritime Offensive Anti-Surface Warfare (OaSuW) Increment II and Next Generation Land Attack Weapons (NGLAW) projects into a single multi-mission development effort as the acquisition follow-on program to the current OASuW Increment I (LRASM) and Land Strike (Tomahawk Modernization) investments. NGSC will focus on assessing, maturing and incorporating emergent technologies to determine the best path forward for the follow-on improved land/maritime strike capabilities.

Expeditionary Warfare

The concept of Expeditionary Warfare allows the U.S. to exploit the seas as maneuver space and as a base for global power projection. It allows us to be forward and to be ready when the nation most needs us. Our ability to deploy from the sea in austere environments at a time and place of our choosing gives us significant tactical, operational and strategic advantages over potential enemies.

The Navy and Marine Corps operate as a team to give the Combatant Commanders and our Nation the options needed to engage with our partners, to deter our adversaries and, when needed, to fight and win. In the 36th Commandant's planning guidance he emphasized the "inherent flexibility, scalability, and combined arms capability" of the MAGTF. That capability is primarily the product of our disciplined, well trained, and motivated Sailors and Marines, but it is enabled by the amphibious ships, the aircraft and the weapons discussed earlier. As important to our expeditionary warfare capabilities, however, is the ability to maneuver ashore and to fight and win once there. That ability is provided through the combination of connectors to move the ground force from the sea base to the ashore objective and the organic capability of the ground force to maneuver and fight ashore.

Connectors

The Seabasing Joint Integrated Concept requires surface and vertical lift capability to transport personnel, supplies and equipment from within the sea base and maneuver them to objectives ashore. Surface and aviation connectors with enhanced speed and range will provide future expeditionary force commanders greater flexibility to operate in contested environments. While the aviation component of our connector capability has seen significant modernization with the fielding of the MV-22 and continuation of the CH-53K program, our primary surface connectors, the landing craft air-cushion (LCAC) and the Landing Craft Utility (LCU) are reaching the end of their service life and require modern replacements.

The President's FY 2016 Budget includes the Ship to Shore Connector (SSC) air-cushioned vehicles as the replacement for the aging LCAC while also continuing investment in the LCAC service life extension program (SLEP) of 72 active LCACs to mitigate the gap as the SSC is developed and fielded. A planned Surface Connector (X)-Recapitalization (SC(X)) program will recapitalize the aging LCU 1610 class.

These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, with the forces that are operating in the littorals and inland for all missions. The Department will continue to explore future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

Ground Forces

The focus of our ground modernization efforts continues to be our ground combat and tactical vehicle (GCTV) portfolio, along with the C2 systems needed to leverage the entire MAGTF once ashore.

Ground Combat and Tactical Vehicles (GCTV)

The Marine Corps GCTV portfolio modernization programs account for approximately 50 percent of the Marine Corps ground modernization investment. The overarching priority within the GCTV portfolio is the replacement of the legacy Amphibious Assault Vehicle (AAV) with modern armored personnel carriers (APCs) through a combination of complementary systems. The Amphibious Combat Vehicle (ACV) program is the Marine Corps' highest ground modernization priority and will use an evolutionary, incremental approach that consists of two increments, ACV 1.1 and ACV 1.2. Increment 1.1 will field a personnel carrier; Increment 1.2 will improve personnel carrier capabilities over Increment 1.1 and will deliver C2 and recovery and maintenance mission role variants.

ACV Phase 1.1 modernizes 2 of our 10 amphibious vehicle companies. The AAV Survivability Upgrade Program (SUP) improves AAV capability in 4 of the 10 companies, in order to support MEU deployments and when globally sourced, provide the essential capacity necessary for the assault echelons of two MEBs. ACV Phase 1.2 will modernize the remaining 4 of 10 companies. This combination of a modern amphibious armored personnel carrier alongside the improved AAV generates a complementary set of capabilities to meet general support lift capability and capacity requirements of our Ground Combat Element.

In parallel with these modernization efforts, a science and technology portfolio is being developed to explore a range of high water speed technology approaches to provide for an affordable, phased modernization of legacy capability to enable extended range littoral maneuver. These efforts will develop the knowledge necessary to reach an informed decision

point in the mid-2020s on the feasibility, affordability, and options for developing a high water speed capability for maneuver from ship-to-shore.

The second highest priority within the portfolio remains the replacement of a portion of the high mobility, multi-purpose, wheeled vehicle (HMMWV) fleet that is most at risk; those trucks that perform a combat function and are typically exposed to enemy fires. In partnership with the Army, the Marine Corps has sequenced the Joint Light Tactical Vehicle (JLTV) program to ensure affordability of the entire GCTV portfolio while replacing one third of the legacy HMMWV fleet with modern tactical trucks prior to the fielding of ACV 1.1.

These core Marine Corps modernization efforts have been designed in a manner to ensure their affordability. However, if the budget is fully sequestered in FY 2016 or beyond, it will jeopardize both the timing and resources required to undertake this strategy and greatly affect our ability to achieve our requirements in both vehicle fleets.

Amphibious Combat Vehicle 1.1

Leveraging demonstrated mature technologies, ACV Phase 1.1 will be acquired as a modified non-developmental item (NDI) and is approved to enter the acquisition phase at Milestone B. A request for proposal will be released in the spring of this year with an expected Engineering and Manufacturing Design (EMD) contract award to two vendors in the fall of 2015 and a competitive down-select for production in FY2018. The acquisition objective (AO) of 204 vehicles will provide lift for two infantry battalions and will achieve IOC in FY 2020. The aggressive acquisition schedule for ACV 1.1 requires full funding and support from Congress.

AAV Survivability Upgrade Program (AAV SUP)

AAV SUP is a well-defined program to increase the capability of the current vehicle by providing force protection upgrades to counter current and emerging threats to the underside of the vehicle. Specifically, the program will provide improved armor, spall liners, blast mitigating seats and protected fuel storage. These improved AAVs will play an essential role in facilitating ship-to-shore mobility until replaced via a future phase of the ACV program. A contract award to one of the two competing vendors will be announced in the coming months. Funding supports continuation of the EMD phase and associated prototyping and testing. The AO for the program is 392 vehicles with IOC in FY2019.

Joint Light Tactical Vehicle (JLTV)

The Department remains firmly partnered with the U.S. Army in fielding a JLTV that lives up to its name, while also being affordable. JLTV will deliver a modern reliable truck with M-ATV protection and unarmored HMMWV land mobility and transportability performance to begin replacing the highest risk portions of our light fleet in 2018. The JLTV has effectively controlled ownership costs by maximizing commonality, reliability, and fuel efficiency, while achieving additional savings through effective competition in all stages of program execution. The program is scheduled to complete the Engineering and Manufacturing Development stage later this year, down-select to one of three competing vendors and begin the production and deployment phase. Funding for major activities in this budget includes test and evaluation, procurement of 109 LRIP assets, and associated government furnished equipment procurement, publications and technical data.

Ground Force Command and Control

Critical to the success ashore of the MAGTF is our ability to coordinate and synchronize our distributed C2 sensors and systems. Our modernization priorities in this area are the Ground/Air task Oriented radar (G/ATOR) and the Common Aviation Command and Control System (CAC2S) Increment I. These systems will provide modern, interoperable technologies to support real-time surveillance, detection and targeting and the common C2 suite to enable the effective employment of that and other sensors and C2 suites across the MAGTF.

Ground/Air Task Oriented Radar (G/ATOR)

G/ATOR will support air defense, air surveillance, counter-battery/target acquisition, and aviation radar tactical enhancements; the final evolution will also support the Marine Corps' air traffic control mission. G/ATOR Block 1 provides air defense and air surveillance capability, achieved Milestone C in 2014 and is currently procuring LRIP units. G/ATOR Block 2 provides counter-battery/target acquisition and is in the EMD phase of acquisition. Funding in this budget includes RDT&E funding for the development of G/ATOR Block 2, procurement funding supporting the LRIP of two G/ATOR Block 1 systems and the refurbishment of one G/ATOR EDM.

Common Aviation Command and Control System (CAC2S)

Phase I Limited Deployment Capability was achieved 2nd Quarter FY2012 and the initial fielding was complete during 4th Quarter FY2013. Phase 2 addresses the remaining Air Combat Element (ACE) Battle Management and C2 requirements. Phase 2 is currently in the EMD Phase with a Milestone C scheduled for the second quarter of FY 2015. Funding in this budget supports the assembly and IOT&E of the first four Limited Deployment Units. Phase 2 completion will result in the delivery of the full CAC2S Increment I capabilities and is planned to begin fielding in FY 2017. The approved AO is 50 systems.

Other Ground Programs

Individual Marines are the foundation of the Marine Corps, the MAGTF and our expeditionary capability. In addition to the major programs described above, this budget supports the continued delivery of required warfighting capabilities to our individual Marines and our flexible MAGTF structure in a timely and affordable manner. The Marine Corps continues to invest in the weapons, individual protective equipment, tactical radios, training systems, and information technology necessary to ensure an effective and efficient fighting force and keep faith with our commitment to those individual Marines who shoulder the burden and privilege of being America's expeditionary force in readiness.

Summary

The Department of the Navy continues to instill affordability, stability, and capacity into the shipbuilding, aviation, and combat vehicle plans to advance capabilities and meet the DSG and Fleet mission requirements. Our force is focused on global reach and access with investments to enable global presence, sea-control, mission flexibility, and when necessary, interdiction.

Continued Congressional support of the Navy's plans and budgets will help sustain a viable shipbuilding industrial base. The FY 2016 President's Budget request funds nine ships, two DDG 51 destroyers, three LCS, two *Virginia* class submarines, one LPD 17, and one T-AO(X). The request supports the right balance between requirements, affordability, and the industrial base.

Naval Aviation is aligned to meet our international responsibilities and national imperatives, and will continue to focus on balancing the challenges of national defense within

the margins of tighter budget constraints, all while fulfilling demands for persistent multi-role ISR, supporting maritime patrol capabilities, and targeting modernization of the force for relevance and sustainability.

As America's expeditionary force in readiness, the Marine Corps modernization investments will ensure continued capability to project power from the sea and provide a powerful response and credible deterrent to aggression anywhere in the littorals. A modern survivable ACV is a critical component of our amphibious capability and the Department of the Navy is committed to embarking on this program with well-defined required capabilities, technical maturity, and affordability of this once in a generation acquisition program.

The Navy and Marine Corps stand ready to answer the call of the Nation. We thank you for your continued support of the Navy and Marine Corps and request your support of the FY 2016 President's Budget for the Department of the Navy.

**Assistant Secretary of the Navy
(Research, Development and Acquisition)**

7/28/2008 - Present

The Honorable Sean J. Stackley

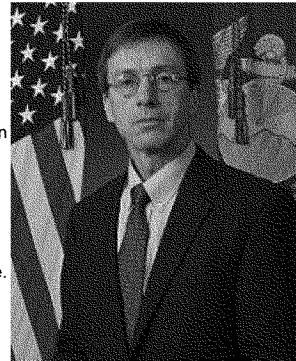
Sean J. Stackley assumed the duties of assistant secretary of the Navy (ASN) (Research, Development & Acquisition (RDA)) following his confirmation by the Senate in July 2008. As the Navy's acquisition executive, Mr. Stackley is responsible for the research, development and acquisition of Navy and Marine Corps platforms and warfare systems which includes oversight of more than 100,000 people and an annual budget in excess of \$50 billion.

Prior to his appointment to ASN (RDA), Mr. Stackley served as a professional staff member of the Senate Armed Services Committee. During his tenure with the Committee, he was responsible for overseeing Navy and Marine Corps programs, U.S. Transportation Command matters and related policy for the Seapower Subcommittee. He also advised on Navy and Marine Corps operations & maintenance, science & technology and acquisition policy.

Mr. Stackley began his career as a Navy surface warfare officer, serving in engineering and combat systems assignments aboard USS *John Young* (DD 973). Upon completing his warfare qualifications, he was designated as an engineering duty officer and served in a series of industrial, fleet, program office and headquarters assignments in ship design and construction, maintenance, logistics and acquisition policy.

From 2001 to 2005, Mr. Stackley served as the Navy's LPD 17 program manager, with responsibility for all aspects of procurement for this major ship program. Having served earlier in his career as production officer for the USS *Arleigh Burke* (DDG 51) and project Naval architect overseeing structural design for the Canadian Patrol Frigate, HMCS *Halifax* (FFH 330), he had the unique experience of having performed a principal role in the design, construction, test and delivery of three first-of-class warships.

Mr. Stackley was commissioned and graduated with distinction from the United States Naval Academy in 1979, with a Bachelor of Science in Mechanical Engineering. He holds the degrees of Ocean Engineer and Master of Science, Mechanical Engineering from the Massachusetts Institute of Technology. Mr. Stackley earned certification as professional engineer, Commonwealth of Virginia, in 1994.





United States Navy Biography

Vice Admiral Joseph P. Mulloy
UNITED STATES NAVY
DEPUTY CHIEF OF NAVAL OPERATIONS,
INTEGRATION OF CAPABILITIES AND RESOURCES

Born in New York City, Rear Adm. Mulloy grew up moving about America as the son of a naval officer. He graduated with distinction from the U.S. Naval Academy in 1979 with a Bachelor of Science degree in Marine Engineering. He also attended Harvard Graduate School of Business, graduating in 1987 with a Master of Business Administration.

His operational submarine assignments were aboard USS Trepang (SSN 674), PCU Miami (SSN 755) as engineer officer, USS Puffer (SSN 652) as executive officer. He served as commanding officer of USS San Juan (SSN 751) and commander Submarine Squadron 15 in Apra Harbor, Guam. In addition to the normal SSN deployments, Mulloy has twice deployed to the Arctic and has surfaced at the North Pole.

Mulloy's significant shore assignments include tours as Plans and Briefing officer and the Special Operations assistant to the Special Operations Division of the Office of Naval Intelligence (ONI-009G), Financial officer at the Pentagon in Operations Division, Office of Budget and Reports (NAVCOMPT), deputy commander of Submarine Squadron 4, executive assistant to the director, Submarine Warfare Division for the Deputy Chief of Naval Operations (DCNO N7/N8), Division chief of the Program, Budget and Analysis Division (PBAD) for Chairman of Joint Chiefs (JCS J8). Mulloy's first flag assignment was as deputy chief of staff for Plans, Policies and Requirements, U.S. Pacific Fleet (N5N8), followed by a short tour as director, Programming Division, OPNAV (N80). Mulloy's most recent assignment was as the Deputy Assistant Secretary of the Navy for Budget (FMB) / Director, Fiscal Management Division, OPNAV (N82) from October 2009 to December 2013.

Mulloy is currently assigned as Deputy Chief of Naval Operations, Integration of Capabilities and Resources (OPNAV N8) in Washington, DC.

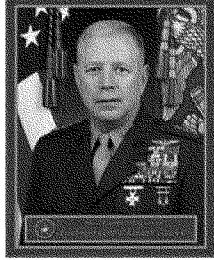
Mulloy's personal decorations include the Defense Superior Service Medal (two awards), Legion of Merit (three awards), Meritorious Service Medal (four awards), the Navy and Marine Corps Commendation Medal (three awards), and the Navy and Marine Corps Achievement Medal (two awards).



Lieutenant General Kenneth J. Glueck, Jr.

Deputy Commandant, Combat Development and Integration, and the Commanding General, Marine Corps Combat Development Command

Lieutenant General Glueck was designated a Naval Aviator in May 1976 and reported to Marine Attack Helicopter Squadron (HMA) 169 at Camp Pendleton, California. During this tour he deployed both with HMA-369 to Okinawa, Japan and with Marine Medium Helicopter Squadron-265. In February 1980 he was reassigned as a Primary Flight Instructor at Training Squadron Three, NAS Whiting Field, Milton, Florida. In July 1983, Lieutenant General Glueck reported to Marine Helicopter One (HMX-1) at Quantico, Virginia where he was designated a Presidential Command Pilot.



Following Marine Corps Command and Staff College in August 1987, Lieutenant General Glueck was assigned to Okinawa, Japan for duty as Air Officer with the Special Operations Training Group, III Marine Expeditionary Force. In June 1989, Lieutenant General Glueck reported as Executive Officer for Marine Light/Attack Helicopter Squadron-269, MCAS New River, North Carolina. In June 1990, he was reassigned as Executive Officer for Marine Medium Helicopter Squadron-365 (HMM-365) participating in Operations Desert Shield and Desert Storm. In June 1991, Lieutenant General Glueck assumed command of HMM-365 and deployed in support of Operation Provide Promise in the Balkans.

Lieutenant General Glueck relinquished command in February 1993 and attended NATO Defense College in Rome, Italy. He was subsequently assigned to Allied Forces Southern Europe as Amphibious Planner in February 1994. In February 1997, Lieutenant General Glueck reported to Headquarters Marine Corps, Programs and Resources. In August 1998, he assumed command of the 26th Marine Expeditionary Unit and deployed for Landing Forces Sixth Fleet deployments 2-99 and 3-00. His units participated in the NATO bombing campaign (Noble Anvil), provided security to refugee camps in Albania (JTF Shining Hope), conducted peace support operations in Kosovo (Joint Guardian), and provided disaster relief following the earthquake in Turkey (Avid Response).

In June 2001, Lieutenant General Glueck reported to Marine Corps Combat Development Command as Director, Expeditionary Force Development Center in Quantico, Virginia. In July 2003, he served

as the Commanding General, 3d Marine Expeditionary Brigade and Deputy Commanding General, III Marine Expeditionary Force in Okinawa, Japan, participating in tsunami relief efforts with CTF-536 and FHA and disaster relief efforts in the Philippines as Commander JTF-535.

In April 2005, Lieutenant General Glueck served as the Chief of Staff, United States Southern Command. In June 2006, he assumed command of the 2d Marine Aircraft Wing, II MEF at MCAS Cherry Point, North Carolina. In April 2008, Lieutenant General Glueck was designated the Chief of Staff for Multi-National Force Iraq in Baghdad. In August 2009, he reported to U.S. Africa Command where he served as Director of Operations and Logistics until 1 January 2011. In January 2011, he reported to Okinawa Japan where he assumed command of III Marine Expeditionary Force and U.S. Marine Forces Japan. In March 2011, he also commanded JTF-505 in support of Operation Tomodachi. Lieutenant General Glueck assumed command of Marine Corps Combat Development Command on 8 August 2013.

Lieutenant General Glueck holds a Bachelor of Science degree from MacMurray College, Jacksonville, Illinois and a Master of Science degree in Business Management from Troy State University, Alabama.

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

FEBRUARY 25, 2015

RESPONSE TO QUESTION SUBMITTED BY MS. BORDALLO

Secretary STACKLEY. The Navy remains committed to maintaining a robust ship maintenance and repair capability in Guam. The dry dock specific business case analysis (BCA) prepared by the Pacific Fleet did not have the depth and scope necessary to fully inform the Navy on how best to address the need for repair facilities in the Western Pacific. Some of the underlying assumptions made when conducting the analysis need to be revisited, which may affect conclusions regarding the affordability of recapitalizing dry docking capability in Guam.

The Navy recently initiated a warfighting assessment that will help define the required repair capabilities in the Pacific. This analysis will be much broader in scope than the BCA. However, when taken in conjunction with the BCA (after revisiting and validating the excepted assumptions), this warfighting assessment will allow the Navy to make more complete and informed resourcing decisions on this important issue. This work is to be completed sufficiently to inform the Fiscal Year 2017 President's Budget request, and will be adjudged alongside the full range of requirements competing for funding in the budget. [See page 12.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

FEBRUARY 25, 2015

QUESTIONS SUBMITTED BY MR. WITTMAN

Mr. WITTMAN. Mr. Stackley, you signed out a memo on 8 August 2014 to the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, highlighting the benefits of accepting non-Navy workload to offset the rising costs of maintaining NWCF infrastructure.

Among the benefits of the Navy Working Capital Fund, you indicate that it aligns with Better Buying Power Initiatives, it will assist in establishing the Navy as a lead systems integrator for certain programs, and establishes more hands-on work at our Navy Laboratories, among other benefits.

If OSD concurs with your approach, what are your next steps to rescind any existing policies and required approvals that have deterred Navy Work Capital Fund activities from accepting non-Navy work in the past?

Secretary STACKLEY. Execution of non-Naval work is assessed routinely in conjunction with Systems Command reviews and any changes to related policy will be considered in this forum. Naval Laboratories are authorized to accept and execute non-Naval work that reinforces the skill sets of the workforce critical to their mission and helps off-set the total cost of operations. Commanders are required to ascertain to their chain of command that the skills and capacity to accomplish non-Naval work are consistent with their assigned areas of expertise.

It is worth noting that since this policy was put in place, non-Naval work at the Naval Laboratories actually increased by nearly six percent from FY2013 to FY2014. The Department of the Navy will continue to follow a disciplined work acceptance approach to ensure the non-Naval workload is executed in accordance with the missions and capacities of the respective Naval Laboratory and to ensure the talent of the science and engineering workforce is optimized to meet current and future Naval missions.

QUESTIONS SUBMITTED BY MS. BORDALLO

Ms. BORDALLO. I am encouraged by continued investment in technologies that support our military strategy in the Asia-Pacific region. As you know, the Pacific is incredibly large—over 165 million square kilometers. While the vastness of the Pacific region presents a tremendous challenge, new technologies have the potential to greatly enhance situational awareness and operations in the Pacific. In particular, I am encouraged about how unmanned systems like the MQ-4C Triton, with its persistence, endurance, and range, can meet the unique challenges of the region.

How important is Triton to the Pacific maritime surveillance strategy, and have you explored opportunities to accelerate Triton to meet our growing needs in the region?

I understand that many of the combatant commanders, particularly U.S. Pacific Command have ISR requirements that exceed their current capability to execute. How do you plan to address this shortfall?

Secretary STACKLEY and Admiral MULLOY. The MQ-4C Triton is a key component of the Navy Maritime Patrol Reconnaissance Force. Its persistent sensor dwell, combined with networked sensors, will enable it to effectively meet ISR requirements in support of the Navy Maritime Strategy. MQ-4C Triton plans to operate from Guam in 2017 and is an integral part of increasing our presence in the Asia-Pacific region.

The FY 2016 budget request reduces risk in the Navy's Maritime Intelligence, Surveillance, Reconnaissance, and Targeting (MISR&T) Transition Plan in both capacity and capability. In addition, the Navy continues to work with the Joint Staff, Office of the Secretary of Defense, and the Fleet to optimize the Navy's MISR&T Transition Plan and comply with the FY 2011 National Defense Authorization Act (NDAA). Despite budgetary pressures forcing a reduction in procurement quantities of baseline air vehicles, the Navy was able to maintain fielding timelines for the future force and continue development of future sensors. The current fiscal environment limits our ability to accelerate the MQ-4C program without incurring significant risk elsewhere. Timely and predictable system delivery is crucial to the Navy's plan for meeting the intent of the FY 2011 NDAA. Due to the MISR&T Transition

Plan's dependence on timely fielding to limit increased costs of sustaining legacy (EP-3E) platforms, continued Congressional support for the MQ-4C program is vital to transition success.

QUESTIONS SUBMITTED BY MR. HUNTER

Mr. HUNTER. I am curious what your current plan is to upgrade or replace the Navy's medium-lift helicopter fleet in the near future? The Seahawk helicopter is a workhorse and is performing admirably but with production ending for both the MH-60S and the MH-60R I am told that now is the time to start planning for mid-life upgrades and/or a replacement aircraft. I am concerned that sequestration has caused the Navy to defer this planning for other priorities and would like to know that you do indeed have a plan for both upgrades and eventual replacement.

Secretary STACKLEY. MH-60S deliveries conclude in December 2015. MH-60R deliveries will continue through mid-2018. The Navy plans to maintain both airframes through 2030. The MH-60S Program plans to commence a Service Life Assessment Program (SLAP) in Fiscal Year (FY) 2016 to determine what potential modifications may be required to keep the airframe viable through its planned service life. MH-60R SLAP activities may begin later than the MH-60S as the aircraft was introduced to the Fleet after the MH-60S.

Additionally, the Navy has an ongoing Aircraft Modification Program that includes a number of efforts addressing warfighter capability improvements, obsolescence, and safety. These efforts will assist in ensuring airframe and system components are supported through the life of the H-60.

Lastly, the Navy's FY 2016 budget submission includes a new Program Element, titled MH-XX, that directs Naval Aviation developmental activities in support of the recapitalization of the Navy H-60 series helicopters, multi-mission medium lift helicopter capability, in the 2028 timeframe. The Navy is participating in the OSD mandated, Army led Future Vertical Lift effort to recapitalize DOD's helicopter fleet. These efforts will enable timely development of a system in support of the Navy's 30-year Aviation Plan.

Mr. HUNTER. While the Navy's SCN and tactical aviation budget accounts generate headlines and attention, I am concerned that serious readiness and quality of life issues impacting our Navy are going unaddressed. Specifically, I am concerned that many of our sailors are being housed in substandard and outdated quarters when they are placed on APL berthing barges.

Typically, sailors are placed on these berthing barges when their ships are in port for repairs, maintenance or when conducting Inter-Deployment Training Cycles. For frame of reference, approximately 400 sailors can be housed on an APL Small, and roughly 1,000 sailors can be housed on an APL Large.

However, these deteriorating and aging vessels have significant health, safety, and quality of life deficiencies. Overhead clearances are only 5'8" to 6'2" high on the main deck and below. The main engineering spaces have encapsulated asbestos covering pipes and lead base paint on bulkheads and decks. Sixty-year old steam systems leak and are in constant need of repair.

Thirteen of the seventeen APLs in service today were built during the 1944–1946 time frame, which makes them almost seventy years old. In one case, The Navy's Board of Inspection and Survey (INSURV) Quicklook Report 221618Z of May 2, 2002, found APL-40 "unfit for human occupancy."

Would you agree that our sailors deserve better than to live on these substandard, antiquated, and hazardous APL barges?

Can the Navy support a strategy to procure APL Small berthing barges as soon as FY2015 and certainly during FY2016 through 2020?

Do I have a commitment from you that the Navy will work with Congress to determine if there are sufficient funds on hand (FY2015) to begin the process of procuring replacement vessels for the legacy APL fleet?

Admiral MULLOY. [No answer was available at the time of printing.]

QUESTIONS SUBMITTED BY MRS. WALORSKI

Mrs. WALORSKI. I co-chair the Working Group on Electronic Warfare, a warfare domain that is particularly important to Indiana given the important work NSWC Crane does in EW R&D, acquisition, testing, fielding, and sustainment, including SEWIP and Next Generation Jammer, one of the largest EW initiatives in history.

Despite these and other efforts, the threat continues to evolve at an alarming pace. Given how dependent we are on having access to the Electromagnetic Spec-

trum for success on the battlefield, what is being done to develop the next generation of EW and keep pace with threats?

A recent Defense Science Board study found major deficiencies in Electronic Warfare across the services. It recommended establishing an Executive Office within OSD AT&L for EW to synchronize EW requirements, technology development, initiative and operational concepts across the Services. What are your thoughts on this recommendation, and what do you think can be done to improve EW integration, specifically in terms of developing an integrated EW strategy/roadmap?

How can Congress help the Defense Department streamline its acquisition process specifically in this area, including possibly circumventing the JROC process?

Secretary STACKLEY. To inform development of the next generation of EW capability and pace advanced threats, U.S. Fleet Forces developed the Navy Electromagnetic Maneuver Warfare (EMW) Campaign Plan, which identifies efforts across four lines of operation: training and certification; strategic communications; experimentation and tactics; and investments and future capabilities. Naval Surface Warfare Center (NSWC) Crane, with the largest EW expertise in the DOD, has a leading role in identifying the future capabilities the Navy needs to meet warfighting requirements. To align EW efforts across DOD, the Deputy Secretary of Defense recently directed the establishment of an Electronic Warfare Executive Committee to develop a comprehensive, cross-Service EW and acquisition strategy. We fully support this effort. With respect to DOD acquisition processes, it will be critical for us to leverage rapid acquisition opportunities and maintain an acquisition workforce with sufficient EW expertise to drive design, development and procurement of new capabilities in response to the changing threat environment. We must also ensure our acquisition process reward procurement of systems that are built on open architectures to allow more flexible, rapid updates and modifications so we can pace the threat.

Mrs. WALORSKI. Who's responsible and accountable for EW in the Navy and Marine Corps, respectively? If what Admiral Greenert has said is true, that this is the next warfare domain, who "owns" it for each of these services?

Secretary STACKLEY and Admiral MULLOY. The Chief of Naval Operations (CNO) directed U.S. Fleet Forces Command (USFF) to lead the overall effort to ensure Navy's ability to fight and win in a contested and congested electromagnetic environment. USFF developed an Electromagnetic Maneuver Warfare (EMW) Campaign Plan that identifies how the Navy will man, train and equip the force for EMW. As the Navy's Executive Agent for EMW, USFF is accountable to CNO for implementation and refinement of the plan. Navy operational commanders, resource sponsors, program managers and systems commands at all levels of the Navy will have a role in implementing that campaign plan.

Mrs. WALORSKI. Who's responsible and accountable for EW in the Navy and Marine Corps, respectively? If what Admiral Greenert has said is true, that this is the next warfare domain, who "owns" it for each of these services?

General GLUECK. The Commandant of the Marine Corps receives advice and recommendations from multiple sources to support key decisions associated with his statutory responsibilities. These decisions include manpower, acquisition, and resourcing matters directly affecting the capabilities and effectiveness of the Service. The Deputy Commandant for Combat Development and Integration (DC CD&I) is assigned as the Marine Corps integrator with the authority and responsibility to conduct capabilities-based force development. For Electronic Warfare (EW), as with other capabilities, DC CD&I develops and implements capability portfolio management processes supported by other advocates, proponents, and commanders providing subject matter expertise and services (e.g., training, acquisition, etc.).

While the Marine Corps recognizes the interdependencies between EW (and broader electromagnetic spectrum operations (EMSO)) and cyberspace operations (CO), at present these two mission areas remain separate, pending potential changes in Joint and/or Service doctrine. In the meantime, Marines will explore ways to achieve the inherent advantages of closely coordinating the execution of EW and CO. For instance, in May 2014, DC CD&I approved the Marine Air-Ground Task Force Cyberspace and Electronic Warfare Coordination Cell Concept. This concept envisions the MAGTF with an organic capability for planning, executing, and assessing the integrated employment of CO and EW capabilities in support of MAGTF operations.

